

Chapter 3 - Web Interface

Style Pages

style.html

```
<html>

  <style>
  header {
    background-color: #3db2c2;
    font-family: calibri;
    text-align: right;
  }
  body {
    background-color: powderblue;
    text-align: center;
    font-family: calibri;
    margin-bottom: 50px;
  }
  h1 {
    font-family: calibri;
    color: #12353a;
    font-size: 300%;
    text-align: center;
    border: solid crimson 5px;
  }
  h2 {
    font-family: calibri;
    font-size: 200%;
    text-align: center;
```

```
}
h3 {
    font-family: calibri;
    font-size: 150%;
    text-align: center;
}
p {
    font-family: calibri;
    font-size: 110%;
    text-align: center;
    margin-left: auto;
    margin-right: auto;
}
p.first {
    font-family: calibri;
    font-size: 110%;
    text-align: center;
    margin-left: auto;
    margin-right: auto;
    width: 650px;
    border: solid green 2px;
}
p.second {
    font-family: calibri;
    font-size: 105%;
    text-align: center;
    margin-left: auto;
    margin-right: auto;
    width: 900px;
}
footer {
    position: fixed;
    bottom: 0;
    width: 100%;
    height: auto;
    background-color: #3db2c2;
```

```

        font-family: calibri;
        text-align: center;
    }
    input.navigate {
        background-color: #f6a2b3;
        border-radius: 2px;
        border: 1px solid #4d4d4d;
        box-shadow: 0 8px 16px 0 rgba(0,0,0,0.2), 0 6px 20px 0 rgba(0,0,0,0.19)
    }
    input.link {
        background-color: #e6e6e6;
        border-radius: 2px;
        border: 1px solid #4d4d4d;
        box-shadow: 0 8px 16px 0 rgba(0,0,0,0.2), 0 6px 20px 0 rgba(0,0,0,0.19)
    }
    input[type="number"] {
        -moz-appearance: textfield;
    }
    input[type="number"]::-webkit-outer-spin-button,
    input[type="number"]::-webkit-inner-spin-button {
        -webkit-appearance: none;
    }
    div.output {
        color: #8c0d26;
        font-size: 120%;
    }
</style>

```

```
</html>
```

style2.html

```
<html>
```

```
<style>
header {
    background-color: #3db2c2;
    font-family: calibri;
    text-align: right;
}
body {
    background-color: powderblue;
    text-align: left;
    font-family: calibri;
    margin-bottom: 50px;
}
h1 {
    font-family: calibri;
    color: #12353a;
    font-size: 300%;
    text-align: center;
    border: solid crimson 5px;
}
h2 {
    font-family: calibri;
    font-size: 200%;
    text-align: center;
}
h3 {
    font-family: calibri;
    font-size: 150%;
    text-align: center;
}
footer {
    position:fixed;
    bottom:0;
    width:100%;
    height:auto;
    background-color: #3db2c2;
    font-family: calibri;
```



```
// Create connection
$conn = new mysqli($hostname, $username, $password, $dbname);
// Check connection
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}

?>
```

index.php

```
<html>

    <head>

        <?php
            include("style.html");
            include("header_1.html");
        ?>

        <title>MetaboBTT Database</title>

        <style>

            table, th, td {
                font-family: calibri;
                text-align: center;
                padding: 5px;
            }
        </style>

    </head>

    <body>
```

```
<h1>MetaboBTT Database</h1>
<br>

<table align="center">

    <form action="loginhandler.php" method="post">

        <tr><td>Username:</td><td><input type="text" name="username" size="20"></td></tr>

        <tr><td>Password:</td><td><input type="password" name="password"
size="20"></td></tr>

        <tr><td>&nbsp;</td><td>&nbsp;<input type="submit" value="Login"></td></tr>

    </form>

</table>

    If you are new to the MetaboBTT Database, please send me an e-mail and I will add you as a
    user. Then click <a href="registration.php">here</a> to create your password.

    <br>
    <br>

    <p><b><i>Download the README <a href="README.docx" style="text-decoration:
none">here</a>.</b></i></p>

</body>

</html>
```


loginhandler.php

```
<html>

    <head>

        <?php
            include("style.html");
            include("header_1.html");
        ?>

        <title>Authorisation Error</title>

    </head>

    <body>

        <h1>MetaboBTT Database</h1>

        <br>

        <p><b>Incorrect username and/or password.</b></p>

        <p><b>Try <a href="index.php">logging in</a> again.</b></p>

        <?php

            session_start();

            include("config.php");

            $username2=$_POST["username"];
            $password2=$_POST["password"];

            $sql="SELECT * FROM user WHERE username = '$username2' AND password = MD5('$password2')";
```

```
$login = $conn->query($sql);

$row_cnt=$login->num_rows;
if ($row_cnt == 1) {

    $_SESSION["username"] = $_POST["username"];

    header("Location: TitlePage.php");

}

?>

</body>

</html>
```

logout.php

```
<?php

session_start();

unset($_SESSION['username']);

header('Location: index.php');

?>
```

Session control/Timeout

sessioncontrol.php (Modified from <https://www.daniweb.com/programming/web-development/threads/124500/session-time-out-in-php>)

```
<?php

session_start();

$inactive = 480;
if(isset($_SESSION["timeout"]) ) {
    $session_life = time() - $_SESSION["timeout"];
    if($session_life > $inactive) {
        header("Location: Timeout.php");
        session_destroy();
    }
}
$_SESSION["timeout"] = time();

if (!isset($_SESSION["username"])) {
    header("Location: index.php");
}

?>
```

Timeout.php

```
<html>

    <head>

        <?php include("style.html"); ?>
```

```
<title>MetaboBTT Login</title>

</head>

<body>

    <h1>MetaboBTT Database</h1>
    <br>

    <p><b>You were inactive for too long!</b></p>

    <p><b>Please <a href="index.php">login</a> again.</b></p>

</body>

</html>
```

Password registration

registration.php

```
<html>

    <head>

        <?php
        include("style.html");
        include("header_1.html");
        ?>

        <title>MetaboBTT Database</title>

        <style>
```

```
        table, th, td {
            font-family: calibri;
            text-align: center;
            padding: 5px;
        }
    </style>

</head>

<body>

    <h1>MetaboBTT Database</h1>
    <br>

    <table align="center">

        <form action="registrationhandler.php" method="post">

            <tr><td>Username:</td><td><input type="text" name="username" size="20"></td></tr>

            <tr><td>Enter password:</td><td><input type="password" name="password"
size="20"></td></tr>

            <tr><td>Re-enter password:</td><td><input type="password" name="password2"
size="20"></td></tr>

            <tr><td>&nbsp;</td><td>&nbsp;<input type="submit" value="Register"></td></tr>

        </form>

    </table>

</body>

</html>
```

registrationhandler.php

```
<html>

    <head>

        <?php
            include("style.html");
            include("header_1.html");
        ?>

        <title>Registration Error</title>

    </head>

    <body>

        <h1>MetaboBTT Database</h1>

        <br>

        <?php

            include("config.php");

            $username=$_POST["username"];
            $password=$_POST["password"];
            $password2=$_POST["password2"];

            if ($password==$password2) {
                $sql="SELECT * FROM user WHERE username='$username'";
                $result = $conn->query($sql);
                $row_cnt=$result->num_rows;
```

```

        if ($row_cnt==1) {
            $sql2="UPDATE user SET password=MD5('$password') WHERE username='$username'";
            $registration=$conn->query($sql2);
            echo "Registration successssful! Proceed to <a href='index.php'>login page</a>";

        } else {
            echo "You do not exist as a user in the database!";
        }
    } else {
        echo "Try again!";
    }

    $conn->close();

    ?>

</body>

</html>

```

Print/Save Option (Modified from <http://stackoverflow.com/questions/1853094/how-to-get-the-columns-names-along-with-resultset-in-php-mysql> and other sources)

print_or_save.php

```

<?php

if ($Retrieve == "Print to screen"){

    echo '<table>';
    $columns=array();
    $resultset=array();
    while ($row = mysqli_fetch_assoc($result)) {

```

```

        if (empty($columns)) {
            $columns = array_keys($row);
            echo '<tr><th>'.implode('</th><th>', $columns).'</th></tr>';
        }
        $resultset[] = $row;
        echo '<tr><td>'.implode('</td><td>', $row).'</td></tr>';
    }

} elseif ($Retrieve == "Save to file (.csv)") {

    $columns=array();
    $resultset=array();
    ob_end_clean();
    $myfile = fopen("outputs/output.csv", "w") or die("Unable to save to file!");
    while ($row = mysqli_fetch_assoc($result)) {
        if (empty($columns)) {
            $columns = array_keys($row);
            $Data1=implode(",", $columns);
            fwrite($myfile, $Data1);
        }
        $resultset[] = $row;
        $Data2= "\n".implode(",", $row);
        fwrite($myfile, $Data2);
    }
    fclose($myfile);

    header('Content-Type: text/csv');
    header('Content-Disposition: attachment; filename="output.csv"');
    readfile('outputs/output.csv');
    exit();
}

?>

```


Title/Home Page

TitlePage.php

```
<html>

    <head>

        <?php
            include("style.html");
            include("sessioncontrol.php");
            include("header_2.html");
        ?>

        <title>MetaboBTT Database</title>

    </head>

    <body>

        <h1>MetaboBTT Database</h1>
        <br>
        <p class="first"> <i>The MetaboBTT Database houses phenotype, SNP annotation and association
analysis data from an ongoing project focused on identifying risk factors for cardiometabolic disease in
South Africans. The data is from participants and their female caregivers from the Birth to Twenty cohort
and DNA samples were genotyped using the Metabochip.</i></p>
        <br>
        <p class="second">The database allows users to generate <strong>summary statistics</strong> on
the phenotype data, <strong>download</strong> relevant phenotype, Metabochip and association analysis
data that match certain user-supplied criteria and get information on how to work with the genotype files
(which can be accessed on request).</p>
        <br>
```

```
<form action="SummaryStatistics.php">
    <input type="submit" value="Summary Statistics">
</form>

<br>

<form action="DownloadData.php">
    <input type="submit" value="Download Data">
</form>

<br>

<form action="GenotypeData.php">
    <input type="submit" value="Genotype Data">
</form>

</body>

<footer>
    <b>Useful links: </b><input type="button"
onClick="parent.location='https://www.ncbi.nlm.nih.gov/'" value="NCBI" class="link">
    <input type="button" onClick="parent.location='https://www.ensembl.org/index.html'"
value="Ensembl" class="link">
    <input type="button"
onClick="parent.location='https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2702039/'" value="Birth to Twenty"
class="link">
</footer>

</html>
```

Summary Statistics Main Page

SummaryStatistics.php

```
<html>

    <head>

        <?php
        include("style.html");
        include("sessioncontrol.php");
        include("header_2.html");
        ?>

        <title>MetaboBTT Database/Summary Statistics</title>

    </head>

    <body>

        <h1>MetaboBTT Database</h1>
        <h2>Summary Statistics</h2>

        <form action="CountBasic.php">
            <input type="submit" value="Count">
        </form>

        <br>

        <form action="AveMinMax.php">
            <input type="submit" value="Average/Minimum/Maximum">
        </form>

    </body>
```

```
<footer>
    <input type="button" onClick="parent.location='TitlePage.php'" value="Home" class="navigate">
    &emsp;&emsp;&emsp;<b>Useful links: </b><input type="button"
onClick="parent.location='https://www.ncbi.nlm.nih.gov/'" value="NCBI" class="link">
    <input type="button" onClick="parent.location='https://www.ensembl.org/index.html'"
value="Ensembl" class="link">
</footer>

</html>
```

Download Data Main Page

DownloadData.php

```
<html>

    <head>

        <?php
        include("style.html");
        include("sessioncontrol.php");
        include("header_2.html");
        ?>

        <title>MetaboBTT Database/Download Data</title>

    </head>

    <body>

        <h1>MetaboBTT Database</h1>
        <h2>Download Data</h2>
```

```
<form action="PhenotypeData.php">
    <input type="submit" value="Phenotype Data">
</form>

<br>

<form action="MetaboChipData_a.php">
    <input type="submit" value="MetaboChip Data">
</form>

<br>

<form action="AssociationData_a.php">
    <input type="submit" value="Association Analysis Data">
</form>

</body>

<footer>
    <input type="button" onClick="parent.location='TitlePage.php'" value="Home" class="navigate">
    &nbsp;&nbsp;&nbsp;&nbsp;<b>Useful links: </b><input type="button"
onClick="parent.location='https://www.ncbi.nlm.nih.gov/'" value="NCBI" class="link">
    <input type="button" onClick="parent.location='https://www.ensembl.org/index.html'"
value="Ensembl" class="link">
</footer>

</html>
```

Genotype Data Page

GenotypeData.php

```
<html>

    <head>

        <?php
        include("sessioncontrol.php");
        ?>

        <title>MetaboBTT Database/Genotype Data</title>

        <style>
        header {
            background-color: #3db2c2;
            font-family: calibri;
            text-align: right;
        }
        body {
            background-color: powderblue;
            text-align: center;
            font-family: calibri;
            margin-bottom: 50px;
        }
        h1 {
            font-family: calibri;
            color: #12353a;
            font-size: 300%;
            text-align: center;
            border: solid crimson 5px;
        }
    }
```

```
h2 {
    font-family: calibri;
    font-size: 200%;
    text-align: center;
}
h3 {
    font-family: calibri;
    font-size: 130%;
    text-align: center;
}
h4 {
    font-family: calibri;
    font-size: 120%;
    text-align: center;
}
p.first {
    font-family: calibri;
    font-size: 110%;
    text-align: center;
    margin-left: auto;
    margin-right: auto;
    width: 800px;
}
p.second {
    font-family: calibri;
}
p.third {
    font-family: calibri;
    color: green;
}
p.fourth {
    font-family: calibri;
    font-size: 120%;
}
div {
    width: 1050px;
```

[illegible]

<body>

<h1>MetaboBTT Database</h1>

<h2>Genotype Data</h2>

<p class="first">The Metabochip genotype data has gone through an extensive quality control (QC) process.</p>

<p class="first">The QC'ed genotype data is available in PLINK format <i>(.bed/.bim/.fam)</i> and can be accessed on request.</p>

<h3>SOME INFORMATION YOU MIGHT FIND USEFUL☺...</h3>

<h4>Manipulating genotype files in PLINK</h4>

<div>

<p class="second">To extract/keep genotype data for specific individuals (<i>saved as a list of Family ID/Individual ID pairs in a file called myIDs.txt</i>):</p>

<p class="third">plink --bfile {INPUT GENOTYPE FILENAME} --keep myIDs.txt --make-bed --out {OUTPUT GENOTYPE FILENAME}</p>

<p class="second">To exclude/remove genotype data for specific individuals (<i>saved as a list of Family ID/Individual ID pairs in a file called myIDs.txt</i>):</p>

<p class="third">plink --bfile {INPUT GENOTYPE FILENAME} --remove myIDs.txt --make-bed --out {OUTPUT GENOTYPE FILENAME}</p>

<p class="second">To extract/keep genotype data for a specific SNP, multiple specific SNPs (<i>saved as a list of SNP IDs in a file called mySNPs.txt</i>) OR a specific chromosome:</p>

<p class="third">plink --bfile {INPUT GENOTYPE FILENAME} --snp {SNP ID} --make-bed --out {OUTPUT GENOTYPE FILENAME}
plink --bfile {INPUT GENOTYPE FILENAME} --extract mySNPs.txt --make-bed --out {OUTPUT GENOTYPE FILENAME}
plink --bfile {INPUT GENOTYPE FILENAME} --chr {CHROMOSOME NUMBER} --make-bed --out {OUTPUT GENOTYPE FILENAME}</p>

<p class="second">To exclude/remove genotype data for specific SNPs (<i>saved as a list of SNP IDs in a file called mySNPs.txt</i>):</p>

<p class="third">plink --bfile {INPUT GENOTYPE FILENAME} --exclude mySNPs.txt --make-bed --out {OUTPUT GENOTYPE FILENAME}</p>

</div>

<h4>Generating basic summary statistics on the genotype data</h4>

<div>

<p class="second">Missingness:</p>

<p class="third">plink --bfile {INPUT GENOTYPE FILENAME} --missing --out {OUTPUT FILENAME}</p>

<p class="second">Hardy-Weinberg Equilibrium:</p>

<p class="third">plink --bfile {INPUT GENOTYPE FILENAME} --hardy --out {OUTPUT FILENAME}</p>

<p class="second">Minor allele frequencies:</p>

<p class="third">plink --bfile {INPUT GENOTYPE FILENAME} --freq --out {OUTPUT FILENAME}</p>

</div>

```
<p class="fourth"><strong>Click <a href="http://pngu.mgh.harvard.edu/~purcell/plink/">here</a>
for more information on how to use PLINK.</strong></p>
```

```
</body>
```

```
<footer>
```

```
    <input type="button" onClick="parent.location='TitlePage.php'" value="Home" class="navigate">
    &emsp;&emsp;&emsp;<b>Useful links: </b><input type="button"
onClick="parent.location='https://www.ncbi.nlm.nih.gov/'" value="NCBI" class="link">
    <input type="button" onClick="parent.location='https://www.ensembl.org/index.html'"
value="Ensembl" class="link">
```

```
</footer>
```

```
</html>
```

Basic Count Page

CountBasic.php

```
<html>
```

```
<head>
```

```
    <?php
    include("style.html");
    include("sessioncontrol.php");
    include("config.php");
    include("header_2.html");
    ?>
```

```
    <title>MetaboBTT Database/Summary Statistics/Count</title>
```

```
</head>
```

<body>

<h1>MetaboBTT Database</h1>

<h2>Summary Statistics</h2>

<h3>Basic Count</h3>

<form method = "post">

Individuals: <select name = "Individual">

<option name = "all" value="all" <?php echo

\$_POST['Individual']==all?"selected":""; ?>>All</option>

<option name = "males" value="1" <?php echo \$_POST['Individual']==1?"selected":"";

?>>Males</option>

<option name = "females" value="2" <?php echo

\$_POST['Individual']==2?"selected":""; ?>>Females</option>

</select>

Dataset: <select name = "Dataset">

<option name = "female caregiver" value="1" <?php echo

\$_POST['Dataset']==1?"selected":""; ?>>Female Caregivers</option>

<option name = "Bt20 participant" value="2" <?php echo

\$_POST['Dataset']==2?"selected":""; ?>>Bt20 Participants</option>

</select>

<input type = "submit" value = "Retrieve count">

</form>

<form action="CountComplex.php">

<input type="submit" value="Add criteria">

</form>

```
<br>
<br>

<div class = "output">
<?php

if ($_SERVER['REQUEST_METHOD'] == 'POST') {

$Gender = $_POST["Individual"];
    if($Gender=="1") {
        $Gender_name="males";
    } elseif ($Gender=="2") {
        $Gender_name="females";
    }
$Dataset= $_POST["Dataset"];
    if ($Dataset=="1") {
        $Dataset_value="female_caregivers_basic";
        $Dataset_name="female caregiver";
    } elseif($Dataset=="2") {
        $Dataset_value="bt20_participants_basic";
        $Dataset_name="Bt20 participant";
    }

if($_POST["Individual"]=="all") {

    $sql = "SELECT * FROM $Dataset_value";
    $result = $conn->query($sql);

    if ($result = $conn->query($sql)) {
        $row_cnt = $result->num_rows;
    }

printf("<strong>There are $row_cnt individuals in the $Dataset_name dataset.</strong>") ;

} else {
```

```

        $sql = "SELECT * FROM $Dataset_value WHERE Gender = $Gender";
        $result = $conn->query($sql);

        if ($result = $conn->query($sql)) {
            $row_cnt = $result->num_rows;
        }

        printf("<strong>There are $row_cnt $Gender_name in the $Dataset_name dataset.<br></strong>");
    }

    $conn->close();
}
?>
</div>

</body>

<footer>
    <input type="button" onClick="parent.location='TitlePage.php'" value="Home" class="navigate">
    <input type="button" onClick="parent.location='SummaryStatistics.php'" value="Summary
Statistics" class="navigate">
    &emsp;&emsp;&emsp;<b>Useful links: </b><input type="button"
onClick="parent.location='https://www.ncbi.nlm.nih.gov/'" value="NCBI" class="link">
    <input type="button" onClick="parent.location='https://www.ensembl.org/index.html'"
value="Ensembl" class="link">
</footer>

</html>

```

Complex Count Page

CountComplex.php

```
<html>

    <head>

        <?php
        include("style.html");
        include("sessioncontrol.php");
        include("config.php");
        include("header_2.html");
        ?>

        <title>MetaboBTT Database/Summary Statistics/Count</title>

    </head>

    <body>

        <h1>MetaboBTT Database</h1>
        <h2>Summary Statistics</h2>
        <h3>Complex Count</h3>

        <form method = "post">

            <b>Individuals: </b><select name = "Individual">
                <option name = "all" value="all" <?php echo
$_POST['Individual']==all?"selected":""; ?>>All</option>
                <option name = "males" value="1" <?php echo $_POST['Individual']==1?"selected":"";
?>>Males</option>
                <option name = "females" value="2" <?php echo
$_POST['Individual']==2?"selected":""; ?>>Females</option>
```

```

        </select>

        <b>Data collection time point: </b><select name = "Year">
            <option name = "5" value="1" <?php echo $_POST['Year']==1?"selected":""; ?>>Year
5</option>
            <option name = "7" value="2" <?php echo $_POST['Year']==2?"selected":""; ?>>Year
7</option>
            <option name = "9/10" value="3" <?php echo $_POST['Year']==3?"selected":""; ?>>Year
9/10</option>
            <option name = "11/12" value="4" <?php echo $_POST['Year']==4?"selected":"";
?>>Year 11/12</option>
            <option name = "13" value="5" <?php echo $_POST['Year']==5?"selected":""; ?>>Year
13</option>
            <option name = "14" value="6" <?php echo $_POST['Year']==6?"selected":""; ?>>Year
14</option>
            <option name = "15" value="7" <?php echo $_POST['Year']==7?"selected":""; ?>>Year
15</option>
            <option name = "16" value="8" <?php echo $_POST['Year']==8?"selected":""; ?>>Year
16</option>
            <option name = "17/18" value="9" <?php echo $_POST['Year']==9?"selected":"";
?>>Year 17/18</option>
            <option name = "19" value="10" <?php echo $_POST['Year']==10?"selected":""; ?>>Year
19</option>
            <option name = "20" value="11" <?php echo $_POST['Year']==11?"selected":""; ?>>Year
20</option>
        </select>

        <b>Dataset: </b><select name = "Dataset">
            <option name = "female caregiver" value="1" <?php echo
$_POST['Dataset']==1?"selected":""; ?>>Female Caregivers</option>
            <option name = "Bt20 participant" value="2" <?php echo
$_POST['Dataset']==2?"selected":""; ?>>Bt20 Participants</option>
        </select>

        <b>Criteria: </b><select name = "Phenotype">
            <option name = "None" value="0"disabled selected hidden>Phenotype</option>

```



```

                <option name = "Age" value="1" <?php echo $_POST['Phenotype']==1?"selected":"";
?>>Age (years)</option>
                <option name = "Height" value="2" <?php echo $_POST['Phenotype']==2?"selected":"";
?>>Height (m)</option>
                <option name = "Weight" value="3" <?php echo $_POST['Phenotype']==3?"selected":"";
?>>Weight (kg)</option>
                <option name = "BMI" value="4" <?php echo $_POST['Phenotype']==4?"selected":"";
?>>BMI (kg/m&sup2)</option>
                <option name = "Hip Circumference" value="5" <?php echo
$_POST['Phenotype']==5?"selected":""; ?>>Hip Circumference (m)</option>
                <option name = "Waist Circumference" value="6" <?php echo
$_POST['Phenotype']==6?"selected":""; ?>>Waist Circumference (m)</option>
                <option name = "Waist To Hip Ratio" value="7" <?php echo
$_POST['Phenotype']==7?"selected":""; ?>>Waist To Hip Ratio</option>
                <option name = "Average SBP" value="8" <?php echo
$_POST['Phenotype']==8?"selected":""; ?>>Average SBP (mmHg)</option>
                <option name = "Average DBP" value="9" <?php echo
$_POST['Phenotype']==9?"selected":""; ?>>Average DBP (mmHg)</option>
                <option name = "Subtotal Body Fat" value="10" <?php echo
$_POST['Phenotype']==10?"selected":""; ?>>Subtotal Body Fat (g)</option>
                <option name = "Subtotal Lean Mass" value="11" <?php echo
$_POST['Phenotype']==11?"selected":""; ?>>Subtotal Lean Mass (g)</option>
                <option name = "Percentage Body Fat" value="12" <?php echo
$_POST['Phenotype']==12?"selected":""; ?>>Percentage Body Fat (%)</option>
        </select>

        <select name = "Operator">
                <option name = "None" value=""disabled selected hidden>Operator</option>
                <option name = "Equal To" value="=" <?php echo
$_POST['Operator']=="?"selected":""; ?>>=</option>
                <option name = "Greater Than" value=">" <?php echo
$_POST['Operator']==">"selected":""; ?>>></option>
                <option name = "Greater Than Or Equal To" value=">=" <?php echo
$_POST['Operator']==">="selected":""; ?>>>=</option>
                <option name = "Less Than" value="<" <?php echo
$_POST['Operator']=="<"selected":""; ?>><</option>

```


[illegible]

```

                <option name = "Age" value="1" <?php echo $_POST['Phenotype3']==1?"selected":"";
?>>Age (years)</option>
                <option name = "Height" value="2" <?php echo $_POST['Phenotype3']==2?"selected":"";
?>>Height (m)</option>
                <option name = "Weight" value="3" <?php echo $_POST['Phenotype3']==3?"selected":"";
?>>Weight (kg)</option>
                <option name = "BMI" value="4" <?php echo $_POST['Phenotype3']==4?"selected":"";
?>>BMI (kg/m&sup2)</option>
                <option name = "Hip Circumference" value="5" <?php echo
$_POST['Phenotype3']==5?"selected":""; ?>>Hip Circumference (m)</option>
                <option name = "Waist Circumference" value="6" <?php echo
$_POST['Phenotype3']==6?"selected":""; ?>>Waist Circumference (m)</option>
                <option name = "Waist To Hip Ratio" value="7" <?php echo
$_POST['Phenotype3']==7?"selected":""; ?>>Waist To Hip Ratio</option>
                <option name = "Average SBP" value="8" <?php echo
$_POST['Phenotype3']==8?"selected":""; ?>>Average SBP (mmHg)</option>
                <option name = "Average DBP" value="9" <?php echo
$_POST['Phenotype3']==9?"selected":""; ?>>Average DBP (mmHg)</option>
                <option name = "Subtotal Body Fat" value="10" <?php echo
$_POST['Phenotype3']==10?"selected":""; ?>>Subtotal Body Fat (g)</option>
                <option name = "Subtotal Lean Mass" value="11" <?php echo
$_POST['Phenotype3']==11?"selected":""; ?>>Subtotal Lean Mass (g)</option>
                <option name = "Percentage Body Fat" value="12" <?php echo
$_POST['Phenotype3']==12?"selected":""; ?>>Percentage Body Fat (%)</option>
        </select>

        <select name = "Operator3">
                <option name = "None" value=""disabled selected hidden>Operator</option>
                <option name = "Equal To" value="=" <?php echo
$_POST['Operator3']=="="?"selected":""; ?>>=</option>
                <option name = "Greater Than" value=">" <?php echo
$_POST['Operator3']==">"?"selected":""; ?>>></option>
                <option name = "Greater Than Or Equal To" value=">=" <?php echo
$_POST['Operator3']==">="?"selected":""; ?>>>=</option>
                <option name = "Less Than" value="<" <?php echo
$_POST['Operator3']=="<"?"selected":""; ?>><</option>

```

```

                <option name = "Less Than Or Equal To" value="<=" <?php echo
$_POST['Operator3']=="<="?"selected":""; ?>><=</option>
            </select>

            <input type="number" step="any" name="CriteriaValue3" placeholder="Enter value"
value="<?php echo isset($_POST['CriteriaValue3']) ? $_POST['CriteriaValue3'] : '' ?>">

            <br>
            <br>

            <input type = "submit" value = "Retrieve count">
            <input type="button" onClick="parent.location='CountComplex.php'" value="Reset">
            <input type="button" onClick="parent.location='CountBasic.php'" value="Back">

        </form>

        <br>
        <br>

        <div class = "output">
        <?php

        if ($_SERVER['REQUEST_METHOD'] == 'POST') {

            $Gender = $_POST["Individual"];
            if($Gender=="1") {
                $Gender_name="male(s)";
            } elseif ($Gender=="2") {
                $Gender_name="female(s)";
            }
            $Year=$_POST["Year"];
            if($Year=="1") {
                $Year_value="phenotype_yr5_bt20_participants";
                $Year_name="year 5";
                $Year_add="_yr5";
            } elseif($Year=="2") {

```

```
        $Year_value="phenotype_yr7_bt20_participants";
        $Year_name="year 7";
        $Year_add="_yr7";
    } elseif($Year=="3") {
        $Year_value="phenotype_yr910_bt20_participants";
        $Year_name="year 9/10";
        $Year_add="_yr910";
    } elseif($Year=="4") {
        $Year_value="phenotype_yr1112_bt20_participants";
        $Year_name="year 11/12";
        $Year_add="_yr1112";
    } elseif($Year=="5") {
        $Year_value="phenotype_yr13_bt20_participants";
        $Year_name="year 13";
        $Year_add="_yr13";
    } elseif($Year=="6") {
        $Year_value="phenotype_yr14_bt20_participants";
        $Year_name="year 14";
        $Year_add="_yr14";
    } elseif($Year=="7") {
        $Year_value="phenotype_yr15_bt20_participants";
        $Year_name="year 15";
        $Year_add="_yr15";
    } elseif($Year=="8") {
        $Year_value="phenotype_yr16_bt20_participants";
        $Year_name="year 16";
        $Year_add="_yr16";
    } elseif($Year=="9") {
        $Year_value="phenotype_yr1718_bt20_participants";
        $Year_name="year 17/18";
        $Year_add="_yr1718";
    } elseif($Year=="10") {
        $Year_value="phenotype_yr19_bt20_participants";
        $Year_name="year 19";
        $Year_add="_yr19";
    } elseif($Year=="11") {
```

```

        $Year_value="phenotype_yr20_bt20_participants";
        $Year_name="year 20";
        $Year_add="_yr20";
    }
    $Dataset=$_POST["Dataset"];
    if ($Dataset=="1") {
        $Dataset_value="female_caregivers_basic";
        $Dataset_name="female caregiver";
    } elseif ($Dataset=="2") {
        $Dataset_value="bt20_participants_basic";
        $Dataset_name="Bt20 participant";
    }
    $Phenotype=$_POST["Phenotype"];
    if ($Phenotype=="1") {
        $Phenotype_value="Age$Year_add";
        $Phenotype_name="age";
        $Phenotype_unit="years";
    } elseif ($Phenotype=="2") {
        $Phenotype_value="Height$Year_add";
        $Phenotype_name="height";
        $Phenotype_unit="m";
    } elseif ($Phenotype=="3") {
        $Phenotype_value="Weight$Year_add";
        $Phenotype_name="weight";
        $Phenotype_unit="kg";
    } elseif ($Phenotype=="4") {
        $Phenotype_value="BMI$Year_add";
        $Phenotype_name="BMI";
        $Phenotype_unit="kg/m<sup>2</sup>";
    } elseif ($Phenotype=="5") {
        $Phenotype_value="HipCircumference$Year_add";
        $Phenotype_name="hip circumference";
        $Phenotype_unit="m";
    } elseif ($Phenotype=="6") {
        $Phenotype_value="WaistCircumference$Year_add";
        $Phenotype_name="waist circumference";
    }

```

```

        $Phenotype_unit="m";
    } elseif($Phenotype=="7") {
        $Phenotype_value="WaistToHipRatio$Year_add";
        $Phenotype_name="waist to hip ratio";
        $Phenotype_unit="";
    } elseif($Phenotype=="8") {
        $Phenotype_value="AverageSBP$Year_add";
        $Phenotype_name="average SBP";
        $Phenotype_unit="mmHg";
    } elseif($Phenotype=="9") {
        $Phenotype_value="AverageDBP$Year_add";
        $Phenotype_name="average DBP";
        $Phenotype_unit="mmHg";
    } elseif($Phenotype=="10") {
        $Phenotype_value="SubtotalBodyFat$Year_add";
        $Phenotype_name="subtotal body fat";
        $Phenotype_unit="g";
    } elseif($Phenotype=="11") {
        $Phenotype_value="SubtotalLeanMass$Year_add";
        $Phenotype_name="subtotal lean mass";
        $Phenotype_unit="g";
    } elseif ($Phenotype=="12") {
        $Phenotype_value="PercentageBodyFat$Year_add";
        $Phenotype_name="percentage body fat";
        $Phenotype_unit="%%";
    }
}

$Operator=$_POST["Operator"];
$criteriaValue=$_POST["CriteriaValue"];

$Phenotype2=$_POST["Phenotype2"];
if ($Phenotype2=="1") {
    $Phenotype2_value="AND Age$Year_add";
    $Phenotype2_name="and age";
    $Phenotype2_unit="years";
} elseif($Phenotype2=="2") {

```



```

        $Phenotype2_value="AND Height$Year_add";
        $Phenotype2_name="and height";
        $Phenotype2_unit="m";
    } elseif($Phenotype2=="3") {
        $Phenotype2_value="AND Weight$Year_add";
        $Phenotype2_name="and weight";
        $Phenotype2_unit="kg";
    } elseif($Phenotype2=="4") {
        $Phenotype2_value="AND BMI$Year_add";
        $Phenotype2_name="and BMI";
        $Phenotype2_unit="kg/m<sup>2</sup>";
    } elseif($Phenotype2=="5") {
        $Phenotype2_value="AND HipCircumference$Year_add";
        $Phenotype2_name="and hip circumference";
        $Phenotype2_unit="m";
    } elseif($Phenotype2=="6") {
        $Phenotype2_value="AND WaistCircumference$Year_add";
        $Phenotype2_name="and waist circumference";
        $Phenotype2_unit="m";
    } elseif($Phenotype2=="7") {
        $Phenotype2_value="AND WaistToHipRatio$Year_add";
        $Phenotype2_name="and waist to hip ratio";
        $Phenotype2_unit="";
    } elseif($Phenotype2=="8") {
        $Phenotype2_value="AND AverageSBP$Year_add";
        $Phenotype2_name="and average SBP";
        $Phenotype2_unit="mmHg";
    } elseif($Phenotype2=="9") {
        $Phenotype2_value="AND AverageDBP$Year_add";
        $Phenotype2_name="and average DBP";
        $Phenotype2_unit="mmHg";
    } elseif($Phenotype2=="10") {
        $Phenotype2_value="AND SubtotalBodyFat$Year_add";
        $Phenotype2_name="and subtotal body fat";
        $Phenotype2_unit="g";
    } elseif($Phenotype2=="11") {

```

```

        $Phenotype2_value="AND SubtotalLeanMass$Year_add";
        $Phenotype2_name="and subtotal lean mass";
        $Phenotype2_unit="g";
    } elseif ($Phenotype2=="12") {
        $Phenotype2_value="AND PercentageBodyFat$Year_add";
        $Phenotype2_name="and percentage body fat";
        $Phenotype2_unit="%%";
    }

$Operator2=$_POST["Operator2"];
$criteriaValue2=$_POST["CriteriaValue2"];

$Phenotype3=$_POST["Phenotype3"];
if ($Phenotype3=="1") {
    $Phenotype3_value="AND Age$Year_add";
    $Phenotype3_name="and age";
    $Phenotype3_unit="years";
} elseif ($Phenotype3=="2") {
    $Phenotype3_value="AND Height$Year_add";
    $Phenotype3_name="and height";
    $Phenotype3_unit="m";
} elseif ($Phenotype3=="3") {
    $Phenotype3_value="AND Weight$Year_add";
    $Phenotype3_name="and weight";
    $Phenotype3_unit="kg";
} elseif ($Phenotype3=="4") {
    $Phenotype3_value="AND BMI$Year_add";
    $Phenotype3_name="and BMI";
    $Phenotype3_unit="kg/m<sup>2</sup>";
} elseif ($Phenotype3=="5") {
    $Phenotype3_value="AND HipCircumference$Year_add";
    $Phenotype3_name="and hip circumference";
    $Phenotype3_unit="m";
} elseif ($Phenotype3=="6") {
    $Phenotype3_value="AND WaistCircumference$Year_add";
    $Phenotype3_name="and waist circumference";

```

```

        $Phenotype3_unit="m";
    } elseif($Phenotype3=="7") {
        $Phenotype3_value="AND WaistToHipRatio$Year_add";
        $Phenotype3_name="and waist to hip ratio";
        $Phenotype3_unit="";
    } elseif($Phenotype3=="8") {
        $Phenotype3_value="AND AverageSBP$Year_add";
        $Phenotype3_name="and average SBP";
        $Phenotype3_unit="mmHg";
    } elseif($Phenotype3=="9") {
        $Phenotype3_value="AND AverageDBP$Year_add";
        $Phenotype3_name="and average DBP";
        $Phenotype3_unit="mmHg";
    } elseif($Phenotype3=="10") {
        $Phenotype3_value="AND SubtotalBodyFat$Year_add";
        $Phenotype3_name="and subtotal body fat";
        $Phenotype3_unit="g";
    } elseif($Phenotype3=="11") {
        $Phenotype3_value="AND SubtotalLeanMass$Year_add";
        $Phenotype3_name="and subtotal lean mass";
        $Phenotype3_unit="g";
    } elseif ($Phenotype3=="12") {
        $Phenotype3_value="AND PercentageBodyFat$Year_add";
        $Phenotype3_name="and percentage body fat";
        $Phenotype3_unit="%%";
    }

$Operator3=$_POST["Operator3"];
$criteriaValue3=$_POST["CriteriaValue3"];

if($Year!="5" AND $Dataset=="1") {

    printf("<strong>There is no data for the female caregivers at the $Year_name data
collection timepoint.</strong>");
}

```

```

if($_POST["Individual"]=="all") {

    if($Dataset=="1") {

        $sql = "SELECT * FROM $Dataset_value NATURAL JOIN phenotype_yr13_female_caregivers
WHERE $Phenotype_value $Operator $CriteriaValue $Phenotype2_value $Operator2 $CriteriaValue2
$Phenotype3_value $Operator3 $CriteriaValue3";

    } else {

        $sql = "SELECT * FROM $Dataset_value NATURAL JOIN $Year_value WHERE
$Phenotype_value $Operator $CriteriaValue $Phenotype2_value $Operator2 $CriteriaValue2 $Phenotype3_value
$Operator3 $CriteriaValue3";

    }

    $result = $conn->query($sql);

    if ($result = $conn->query($sql)) {
        $row_cnt = $result->num_rows;

        if($Dataset=="1" AND $Phenotype!="0" AND $Operator!="") {

            printf("<strong>There are $row_cnt individual(s) in the year 13 $Dataset_name
dataset with $Phenotype_name $Operator $CriteriaValue $Phenotype_unit $Phenotype2_name $Operator2
$CriteriaValue2 $Phenotype2_unit $Phenotype3_name $Operator3 $CriteriaValue3
$Phenotype3_unit.</strong>");

        } elseif ($Dataset=="2" AND $Phenotype!="0" AND $Operator!="") {

            printf("<strong>There are $row_cnt individual(s) in the $Year_name
$Dataset_name dataset with $Phenotype_name $Operator $CriteriaValue $Phenotype_unit $Phenotype2_name
$Operator2 $CriteriaValue2 $Phenotype2_unit $Phenotype3_name $Operator3 $CriteriaValue3
$Phenotype3_unit.</strong>");

        }

    }

}

```

```

    }
    } else {

        if($Dataset=="1") {

            $sql = "SELECT * FROM $Dataset_value NATURAL JOIN phenotype_yr13_female_caregivers
WHERE $Phenotype_value $Operator $CriteriaValue $Phenotype2_value $Operator2 $CriteriaValue2
$Phenotype3_value $Operator3 $CriteriaValue3 AND Gender = $Gender";

            } else {

                $sql = "SELECT * FROM $Dataset_value NATURAL JOIN $Year_value WHERE
$Phenotype_value $Operator $CriteriaValue $Phenotype2_value $Operator2 $CriteriaValue2 $Phenotype3_value
$Operator3 $CriteriaValue3 AND Gender = $Gender";

            }

            $result = $conn->query($sql);

            if ($result = $conn->query($sql)) {
                $row_cnt = $result->num_rows;

                if($Dataset=="1" AND $Phenotype!="0" AND $Operator!="") {

                    printf("<strong>There are $row_cnt $Gender_name in the year 13 $Dataset_name
dataset with $Phenotype_name $Operator $CriteriaValue $Phenotype_unit $Phenotype2_name $Operator2
$CriteriaValue2 $Phenotype2_unit $Phenotype3_name $Operator3 $CriteriaValue3
$Phenotype3_unit.<br></strong>");

                } elseif ($Dataset=="2" AND $Phenotype!="0" AND $Operator!="") {

                    printf("<strong>There are $row_cnt $Gender_name in the $Year_name
$Dataset_name dataset with $Phenotype_name $Operator $CriteriaValue $Phenotype_unit $Phenotype2_name
$Operator2 $CriteriaValue2 $Phenotype2_unit $Phenotype3_name $Operator3 $CriteriaValue3
$Phenotype3_unit.<br></strong>");

                }

            }

```

```

        }
    }

    $conn->close();
}
?>
</div>

</body>

<footer>
    <input type="button" onClick="parent.location='TitlePage.php'" value="Home" class="navigate">
    <input type="button" onClick="parent.location='SummaryStatistics.php'" value="Summary
Statistics" class="navigate">
    &emsp;&emsp;&emsp;<b>Useful links: </b><input type="button"
onClick="parent.location='https://www.ncbi.nlm.nih.gov/'" value="NCBI" class="link">
    <input type="button" onClick="parent.location='https://www.ensembl.org/index.html'"
value="Ensembl" class="link">
</footer>

</html>

```

Average/Minimum/Maximum Pages

AveMinMax.php

```

<html>

<head>

    <?php
    include("style.html");
    include("sessioncontrol.php");

```

```

include("config.php");
include("header_2.html");
?>

<title>MetaboBTT Database/Summary Statistics/AveMinMax</title>

</head>

<body>

<h1>MetaboBTT Database</h1>
<h2>Summary Statistics</h2>
<h3>Average/Minimum/Maximum</h3>

<form method = "post">

    <b>Measurement: </b><select name = "Measurement">
        <option name = "Average" value="Average" <?php echo
$_POST['Measurement']==Average?"selected":""; ?>>Average</option>
        <option name = "Minimum" value="Minimum" <?php echo
$_POST['Measurement']==Minimum?"selected":""; ?>>Minimum</option>
        <option name = "Maximum" value="Maximum" <?php echo
$_POST['Measurement']==Maximum?"selected":""; ?>>Maximum</option>
    </select>

    <b>Phenotype: </b><select name = "Phenotype">
        <option name = "Age" value="1" <?php echo $_POST['Phenotype']==1?"selected":"";
?>>Age (years)</option>
        <option name = "Height" value="2" <?php echo $_POST['Phenotype']==2?"selected":"";
?>>Height (m)</option>
        <option name = "Weight" value="3" <?php echo $_POST['Phenotype']==3?"selected":"";
?>>Weight (kg)</option>
        <option name = "BMI" value="4" <?php echo $_POST['Phenotype']==4?"selected":"";
?>>BMI (kg/m&sup2)</option>
        <option name = "Hip Circumference" value="5" <?php echo
$_POST['Phenotype']==5?"selected":""; ?>>Hip Circumference (m)</option>

```

```

        <option name = "Waist Circumference" value="6" <?php echo
$_POST['Phenotype']==6?"selected":""; ?>>Waist Circumference (m)</option>
        <option name = "Waist To Hip Ratio" value="7" <?php echo
$_POST['Phenotype']==7?"selected":""; ?>>Waist To Hip Ratio</option>
        <option name = "Average SBP" value="8" <?php echo
$_POST['Phenotype']==8?"selected":""; ?>>Average SBP (mmHg)</option>
        <option name = "Average DBP" value="9" <?php echo
$_POST['Phenotype']==9?"selected":""; ?>>Average DBP (mmHg)</option>
        <option name = "Subtotal Body Fat" value="10" <?php echo
$_POST['Phenotype']==10?"selected":""; ?>>Subtotal Body Fat (g)</option>
        <option name = "Subtotal Lean Mass" value="11" <?php echo
$_POST['Phenotype']==11?"selected":""; ?>>Subtotal Lean Mass (g)</option>
        <option name = "Percentage Body Fat" value="12" <?php echo
$_POST['Phenotype']==12?"selected":""; ?>>Percentage Body Fat (%)</option>
    </select>

```

```

    <b>Individuals: </b><select name = "Individual">
        <option name = "all" value="all" <?php echo
$_POST['Individual']==all?"selected":""; ?>>All</option>
        <option name = "males" value="1" <?php echo $_POST['Individual']==1?"selected":"";
?>>Males</option>
        <option name = "females" value="2" <?php echo
$_POST['Individual']==2?"selected":""; ?>>Females</option>
    </select>

```

```

    <b>Data collection time point: </b><select name = "Year">
        <option name = "5" value="1" <?php echo $_POST['Year']==1?"selected":""; ?>>Year
5</option>
        <option name = "7" value="2" <?php echo $_POST['Year']==2?"selected":""; ?>>Year
7</option>
        <option name = "9/10" value="3" <?php echo $_POST['Year']==3?"selected":""; ?>>Year
9/10</option>
        <option name = "11/12" value="4" <?php echo $_POST['Year']==4?"selected":"";
?>>Year 11/12</option>
        <option name = "13" value="5" <?php echo $_POST['Year']==5?"selected":""; ?>>Year
13</option>

```



```

14</option>        <option name = "14" value="6" <?php echo $_POST['Year']==6?"selected":""; ?>>Year
15</option>        <option name = "15" value="7" <?php echo $_POST['Year']==7?"selected":""; ?>>Year
16</option>        <option name = "16" value="8" <?php echo $_POST['Year']==8?"selected":""; ?>>Year
?>>Year 17/18</option>    <option name = "17/18" value="9" <?php echo $_POST['Year']==9?"selected":"";
19</option>        <option name = "19" value="10" <?php echo $_POST['Year']==10?"selected":""; ?>>Year
20</option>        <option name = "20" value="11" <?php echo $_POST['Year']==11?"selected":""; ?>>Year
        </select>

        <b>Dataset: </b><select name = "Dataset">
                <option name = "female caregiver" value="1" <?php echo
$_POST['Dataset']==1?"selected":""; ?>>Female Caregivers</option>
                <option name = "Bt20 participant" value="2" <?php echo
$_POST['Dataset']==2?"selected":""; ?>>Bt20 Participants</option>
        </select>

        <br>
        <br>

        <input type = "submit" value = "Calculate">
        <input type="button" onClick="parent.location='AveMinMax.php'" value="Reset">

        <br>
        <br>
        <b>OR get summary statistics for specific individuals: </b><input type="button"
onClick="parent.location='AveMinMax_User.php'" value="Specify Individuals">

        </form>

        <br>
        <br>

```

```
<div class ="output">
<?php

if ($_SERVER['REQUEST_METHOD'] == 'POST') {

$Measurement=$_POST["Measurement"];
    if($Measurement=="Average") {
        $Measurement_value="AVG";
        $Measurement_name="average";
    } elseif($Measurement=="Minimum") {
        $Measurement_value="MIN";
        $Measurement_name="minimum";
    } elseif($Measurement=="Maximum") {
        $Measurement_value="MAX";
        $Measurement_name="maximum";
    }
$Phenotype=$_POST["Phenotype"];
    if ($Phenotype=="1") {
        $Phenotype_value="Age";
        $Phenotype_name="age";
        $Phenotype_unit="years";
    } elseif($Phenotype=="2") {
        $Phenotype_value="Height";
        $Phenotype_name="height";
        $Phenotype_unit="m";
    } elseif($Phenotype=="3") {
        $Phenotype_value="Weight";
        $Phenotype_name="weight";
        $Phenotype_unit="kg";
    } elseif($Phenotype=="4") {
        $Phenotype_value="BMI";
        $Phenotype_name="BMI";
        $Phenotype_unit="kg/m2";
    } elseif($Phenotype=="5") {
        $Phenotype_value="HipCircumference";
```

```

        $Phenotype_name="hip circumference";
        $Phenotype_unit="m";
    } elseif($Phenotype=="6") {
        $Phenotype_value="HipCircumference";
        $Phenotype_name="hip circumference";
        $Phenotype_unit="m";
    } elseif($Phenotype=="7") {
        $Phenotype_value="WaistToHipRatio";
        $Phenotype_name="waist to hip ratio";
        $Phenotype_unit="";
    } elseif($Phenotype=="8") {
        $Phenotype_value="AverageSBP";
        $Phenotype_name="average SBP";
        $Phenotype_unit="mmHg";
    } elseif($Phenotype=="9") {
        $Phenotype_value="AverageDBP";
        $Phenotype_name="average DBP";
        $Phenotype_unit="mmHg";
    } elseif($Phenotype=="10") {
        $Phenotype_value="SubtotalBodyFat";
        $Phenotype_name="subtotal body fat";
        $Phenotype_unit="g";
    } elseif($Phenotype=="11") {
        $Phenotype_value="SubtotalLeanMass";
        $Phenotype_name="subtotal lean mass";
        $Phenotype_unit="g";
    } elseif ($Phenotype=="12") {
        $Phenotype_value="PercentageBodyFat";
        $Phenotype_name="percentage body fat";
        $Phenotype_unit="%%";
    }
}
$Gender=$_POST["Individual"];
if($Gender=="1") {
    $Gender_name="males";
} elseif ($Gender=="2") {
    $Gender_name="females";
}

```

```
}
$Year=$_POST["Year"];
if($Year=="1") {
    $Year_value="phenotype_yr5_bt20_participants";
    $Year_name="year 5";
    $Year_add="_yr5";
} elseif($Year=="2") {
    $Year_value="phenotype_yr7_bt20_participants";
    $Year_name="year 7";
    $Year_add="_yr7";
} elseif($Year=="3") {
    $Year_value="phenotype_yr910_bt20_participants";
    $Year_name="year 9/10";
    $Year_add="_yr910";
} elseif($Year=="4") {
    $Year_value="phenotype_yr1112_bt20_participants";
    $Year_name="year 11/12";
    $Year_add="_yr1112";
} elseif($Year=="5") {
    $Year_value="phenotype_yr13_bt20_participants";
    $Year_name="year 13";
    $Year_add="_yr13";
} elseif($Year=="6") {
    $Year_value="phenotype_yr14_bt20_participants";
    $Year_name="year 14";
    $Year_add="_yr14";
} elseif($Year=="7") {
    $Year_value="phenotype_yr15_bt20_participants";
    $Year_name="year 15";
    $Year_add="_yr15";
} elseif($Year=="8") {
    $Year_value="phenotype_yr16_bt20_participants";
    $Year_name="year 16";
    $Year_add="_yr16";
} elseif($Year=="9") {
    $Year_value="phenotype_yr1718_bt20_participants";
```

```

        $Year_name="year 17/18";
        $Year_add="_yr1718";
    } elseif($Year=="10") {
        $Year_value="phenotype_yr19_bt20_participants";
        $Year_name="year 19";
        $Year_add="_yr19";
    } elseif($Year=="11") {
        $Year_value="phenotype_yr20_bt20_participants";
        $Year_name="year 20";
        $Year_add="_yr20";
    }
}
$Dataset=$_POST["Dataset"];
if ($Dataset=="1") {
    $Dataset_value="female_caregivers_basic";
    $Dataset_name="female caregiver";
} elseif($Dataset=="2") {
    $Dataset_value="bt20_participants_basic";
    $Dataset_name="Bt20 participant";
}

if($Year!="5" AND $Dataset=="1") {

    printf("<strong>There is no data for the female caregivers at the $Year_name data
collection timepoint.</strong>");
}

if($_POST["Individual"]=="all") {

    if($Dataset=="1") {

        $sql = "SELECT $Measurement_value($Phenotype_value$Year_add) FROM $Dataset_value
NATURAL JOIN phenotype_yr13_female_caregivers WHERE trim($Phenotype_value$Year_add)";

    } else {

```

```

        $sql = "SELECT $Measurement_value($Phenotype_value$Year_add) FROM $Dataset_value
NATURAL JOIN $Year_value WHERE trim($Phenotype_value$Year_add)";
    }

    if ($result = $conn->query($sql)) {
        $row = mysqli_fetch_row($result);
        $rounded = round($row[0],3);

        printf("<strong>The $Measurement_name $Phenotype_name of all individuals in the
$Year_name $Dataset_name dataset is $rounded $Phenotype_unit.</strong>");
    }
    } else {

        if($Dataset=="1") {

            $sql = "SELECT $Measurement_value($Phenotype_value$Year_add) FROM $Dataset_value
NATURAL JOIN phenotype_yr13_female_caregivers WHERE trim($Phenotype_value$Year_add) AND Gender=$Gender";

            } else {

                $sql = "SELECT $Measurement_value($Phenotype_value$Year_add) FROM $Dataset_value
NATURAL JOIN $Year_value WHERE trim($Phenotype_value$Year_add) AND Gender=$Gender";
            }

            if ($result = $conn->query($sql)) {
                $row = mysqli_fetch_row($result);
                $rounded = round($row[0],3);

                printf("<strong>The $Measurement_name $Phenotype_name of $Gender_name in the
$Year_name $Dataset_name dataset is $rounded $Phenotype_unit.</strong>");
            }
        }
    }
    if($_POST["Individual"]=="1" AND $_POST["Dataset"]=="1") {
        echo "<b>...wait, there are no males in the female caregiver dataset!</b>";
    }
}

```

```

        $conn->close();
    }
    ?>
</div>

</body>

<footer>
    <input type="button" onClick="parent.location='TitlePage.php'" value="Home" class="navigate">
    <input type="button" onClick="parent.location='SummaryStatistics.php'" value="Summary
Statistics" class="navigate">
    &nbsp;&nbsp;&nbsp;&nbsp;<b>Useful links: </b><input type="button"
onClick="parent.location='https://www.ncbi.nlm.nih.gov/'" value="NCBI" class="link">
    <input type="button" onClick="parent.location='https://www.ensembl.org/index.html'"
value="Ensembl" class="link">
</footer>

</html>

```

AveMinMax_User.php

```

<html>

<head>

    <?php
    include("style.html");
    include("sessioncontrol.php");
    include("config.php");
    include("header_2.html");
    ?>

    <title>MetaboBTT Database/Summary Statistics/AveMinMax</title>

```

```
</head>

<body>

    <h1>MetaboBTT Database</h1>
    <h2>Summary Statistics</h2>
    <h3>Average/Minimum/Maximum</h3>

    <form method = "post" enctype="multipart/form-data">

        <b>Measurement: </b><select name = "Measurement">
            <option name = "Average" value="Average" <?php echo
$_POST['Measurement']==Average?"selected":""; ?>>Average</option>
            <option name = "Minimum" value="Minimum" <?php echo
$_POST['Measurement']==Minimum?"selected":""; ?>>Minimum</option>
            <option name = "Maximum" value="Maximum" <?php echo
$_POST['Measurement']==Maximum?"selected":""; ?>>Maximum</option>
        </select>

        <b>Phenotype: </b><select name = "Phenotype">
            <option name = "Age" value="1" <?php echo $_POST['Phenotype']==1?"selected":"";
?>>Age (years)</option>
            <option name = "Height" value="2" <?php echo $_POST['Phenotype']==2?"selected":"";
?>>Height (m)</option>
            <option name = "Weight" value="3" <?php echo $_POST['Phenotype']==3?"selected":"";
?>>Weight (kg)</option>
            <option name = "BMI" value="4" <?php echo $_POST['Phenotype']==4?"selected":"";
?>>BMI (kg/m&sup2)</option>
            <option name = "Hip Circumference" value="5" <?php echo
$_POST['Phenotype']==5?"selected":""; ?>>Hip Circumference (m)</option>
            <option name = "Waist Circumference" value="6" <?php echo
$_POST['Phenotype']==6?"selected":""; ?>>Waist Circumference (m)</option>
            <option name = "Waist To Hip Ratio" value="7" <?php echo
$_POST['Phenotype']==7?"selected":""; ?>>Waist To Hip Ratio</option>
            <option name = "Average SBP" value="8" <?php echo
$_POST['Phenotype']==8?"selected":""; ?>>Average SBP (mmHg)</option>
```



```

        <option name = "Average DBP" value="9" <?php echo
$_POST['Phenotype']==9?"selected":""; ?>>Average DBP (mmHg)</option>
        <option name = "Subtotal Body Fat" value="10" <?php echo
$_POST['Phenotype']==10?"selected":""; ?>>Subtotal Body Fat (g)</option>
        <option name = "Subtotal Lean Mass" value="11" <?php echo
$_POST['Phenotype']==11?"selected":""; ?>>Subtotal Lean Mass (g)</option>
        <option name = "Percentage Body Fat" value="12" <?php echo
$_POST['Phenotype']==12?"selected":""; ?>>Percentage Body Fat (%)</option>
    </select>

    <b>Individuals: </b><input type="file" name="Individuals">

    <b>Data collection time point: </b><select name = "Year">
        <option name = "5" value="1" <?php echo $_POST['Year']==1?"selected":""; ?>>Year
5</option>
        <option name = "7" value="2" <?php echo $_POST['Year']==2?"selected":""; ?>>Year
7</option>
        <option name = "9/10" value="3" <?php echo $_POST['Year']==3?"selected":""; ?>>Year
9/10</option>
        <option name = "11/12" value="4" <?php echo $_POST['Year']==4?"selected":"";
?>>Year 11/12</option>
        <option name = "13" value="5" <?php echo $_POST['Year']==5?"selected":""; ?>>Year
13</option>
        <option name = "14" value="6" <?php echo $_POST['Year']==6?"selected":""; ?>>Year
14</option>
        <option name = "15" value="7" <?php echo $_POST['Year']==7?"selected":""; ?>>Year
15</option>
        <option name = "16" value="8" <?php echo $_POST['Year']==8?"selected":""; ?>>Year
16</option>
        <option name = "17/18" value="9" <?php echo $_POST['Year']==9?"selected":"";
?>>Year 17/18</option>
        <option name = "19" value="10" <?php echo $_POST['Year']==10?"selected":""; ?>>Year
19</option>
        <option name = "20" value="11" <?php echo $_POST['Year']==11?"selected":""; ?>>Year
20</option>
    </select>

```

```

        <b>Dataset: </b><select name = "Dataset">
            <option name = "female caregiver" value="1" <?php echo
$_POST['Dataset']==1?"selected":""; ?>>Female Caregivers</option>
            <option name = "Bt20 participant" value="2" <?php echo
$_POST['Dataset']==2?"selected":""; ?>>Bt20 Participants</option>
        </select>

        <br>
        <br>

        <input type = "submit" value = "Calculate">
        <input type="button" onClick="parent.location='AveMinMax_User.php'" value="Reset">
        <input type="button" onClick="parent.location='AveMinMax.php'" value="Back">

    </form>

    <br>
    <br>

    <div class = "output">
    <?php

    if ($_SERVER['REQUEST_METHOD'] == 'POST') {

    $Measurement=$_POST["Measurement"];
        if($Measurement=="Average") {
            $Measurement_value="AVG";
            $Measurement_name="average";
        } elseif($Measurement=="Minimum") {
            $Measurement_value="MIN";
            $Measurement_name="minimum";
        } elseif($Measurement=="Maximum") {
            $Measurement_value="MAX";
            $Measurement_name="maximum";
        }
    }

```

```
$Phenotype=$_POST["Phenotype"];
if ($Phenotype=="1") {
    $Phenotype_value="Age";
    $Phenotype_name="age";
    $Phenotype_unit="years";
} elseif($Phenotype=="2") {
    $Phenotype_value="Height";
    $Phenotype_name="height";
    $Phenotype_unit="m";
} elseif($Phenotype=="3") {
    $Phenotype_value="Weight";
    $Phenotype_name="weight";
    $Phenotype_unit="kg";
} elseif($Phenotype=="4") {
    $Phenotype_value="BMI";
    $Phenotype_name="BMI";
    $Phenotype_unit="kg/m2";
} elseif($Phenotype=="5") {
    $Phenotype_value="HipCircumference";
    $Phenotype_name="hip circumference";
    $Phenotype_unit="m";
} elseif($Phenotype=="6") {
    $Phenotype_value="HipCircumference";
    $Phenotype_name="hip circumference";
    $Phenotype_unit="m";
} elseif($Phenotype=="7") {
    $Phenotype_value="WaistToHipRatio";
    $Phenotype_name="waist to hip ratio";
    $Phenotype_unit="";
} elseif($Phenotype=="8") {
    $Phenotype_value="AverageSBP";
    $Phenotype_name="average SBP";
    $Phenotype_unit="mmHg";
} elseif($Phenotype=="9") {
    $Phenotype_value="AverageDBP";
    $Phenotype_name="average DBP";
}
```

```

        $Phenotype_unit="mmHg";
    } elseif($Phenotype=="10") {
        $Phenotype_value="SubtotalBodyFat";
        $Phenotype_name="subtotal body fat";
        $Phenotype_unit="g";
    } elseif($Phenotype=="11") {
        $Phenotype_value="SubtotalLeanMass";
        $Phenotype_name="subtotal lean mass";
        $Phenotype_unit="g";
    } elseif ($Phenotype=="12") {
        $Phenotype_value="PercentageBodyFat";
        $Phenotype_name="percentage body fat";
        $Phenotype_unit="%%";
    }
}
$Year=$_POST["Year"];
if($Year=="1") {
    $Year_value="phenotype_yr5_bt20_participants";
    $Year_name="year 5";
    $Year_add="_yr5";
} elseif($Year=="2") {
    $Year_value="phenotype_yr7_bt20_participants";
    $Year_name="year 7";
    $Year_add="_yr7";
} elseif($Year=="3") {
    $Year_value="phenotype_yr910_bt20_participants";
    $Year_name="year 9/10";
    $Year_add="_yr910";
} elseif($Year=="4") {
    $Year_value="phenotype_yr1112_bt20_participants";
    $Year_name="year 11/12";
    $Year_add="_yr1112";
} elseif($Year=="5") {
    $Year_value="phenotype_yr13_bt20_participants";
    $Year_name="year 13";
    $Year_add="_yr13";
} elseif($Year=="6") {

```

```

        $Year_value="phenotype_yr14_bt20_participants";
        $Year_name="year 14";
        $Year_add="_yr14";
    } elseif($Year=="7") {
        $Year_value="phenotype_yr15_bt20_participants";
        $Year_name="year 15";
        $Year_add="_yr15";
    } elseif($Year=="8") {
        $Year_value="phenotype_yr16_bt20_participants";
        $Year_name="year 16";
        $Year_add="_yr16";
    } elseif($Year=="9") {
        $Year_value="phenotype_yr1718_bt20_participants";
        $Year_name="year 17/18";
        $Year_add="_yr1718";
    } elseif($Year=="10") {
        $Year_value="phenotype_yr19_bt20_participants";
        $Year_name="year 19";
        $Year_add="_yr19";
    } elseif($Year=="11") {
        $Year_value="phenotype_yr20_bt20_participants";
        $Year_name="year 20";
        $Year_add="_yr20";
    }
}
$Dataset=$_POST["Dataset"];
if ($Dataset=="1") {
    $Dataset_value="female_caregivers_basic";
    $Dataset_name="female caregiver";
} elseif($Dataset=="2") {
    $Dataset_value="bt20_participants_basic";
    $Dataset_name="Bt20 participant";
}

$myfile = fopen($_FILES["Individuals"]["tmp_name"], "rb") or die("<b>Please upload a
file!</b>");
$FileType = pathinfo(basename($_FILES["Individuals"]["name"]),PATHINFO_EXTENSION);

```

```

if ($FileType == "txt") {
    while(($content= fgets($myfile)) !==false){
        $content2=trim($content);
        $content3[]="'$content2'";
    }
    $content4=implode(",",$content3);

    fclose($myfile);
} else {
    echo "<b>Make sure the file you are trying to upload is a text file!</b>";
}

if($FileType == "txt" AND $Year!="5" AND $Dataset=="1") {

    printf("<strong>There is no data for the female caregivers at the $Year_name data
collection timepoint.</strong>");
}

if($Dataset=="1") {

    $sql = "SELECT $Measurement_value($Phenotype_value$Year_add) FROM $Dataset_value NATURAL
JOIN phenotype_yr13_female_caregivers WHERE trim($Phenotype_value$Year_add) AND IndividualID IN
($content4)";

} else {

    $sql = "SELECT $Measurement_value($Phenotype_value$Year_add) FROM $Dataset_value NATURAL
JOIN $Year_value WHERE trim($Phenotype_value$Year_add) AND IndividualID IN ($content4)";

}

if ($result = $conn->query($sql)) {
    $row = mysqli_fetch_row($result);
    $rounded = round($row[0],3);

```

```

        printf ("<strong>The $Measurement_name $Phenotype_name of the user-specified individuals
from the $Year_name $Dataset_name dataset is $rounded $Phenotype_unit.</strong>");
    }

    $conn->close();
}
?>
</div>

</body>

<footer>
    <input type="button" onClick="parent.location='TitlePage.php'" value="Home" class="navigate">
    <input type="button" onClick="parent.location='SummaryStatistics.php'" value="Summary
Statistics" class="navigate">
    &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;<b>Useful links: </b><input type="button"
onClick="parent.location='https://www.ncbi.nlm.nih.gov/'" value="NCBI" class="link">
    <input type="button" onClick="parent.location='https://www.ensembl.org/index.html'"
value="Ensembl" class="link">
</footer>

</html>

```

Phenotype Data Download Pages

PhenotypeData.php

```

<html>

<head>

    <?php
    include("style.html");

```

```

include("sessioncontrol.php");
include("header_2.html");
?>

<title>MetaboBTT Database/Download Data/Phenotype Data</title>

</head>

<body>

    <h1>MetaboBTT Database</h1>
    <h2>Download Data</h2>
    <h3>Phenotype Data</h3>

    <br>

    <form action="PhenotypeData_FCG_a.php">
        <input type="submit" value="Female Caregivers">
    </form>

    <form action="PhenotypeData_BTTP_a.php">
        <input type="submit" value="Bt20 Participants">
    </form>

</body>

<footer>
    <input type="button" onClick="parent.location='TitlePage.php'" value="Home" class="navigate">
    <input type="button" onClick="parent.location='DownloadData.php'" value="Download Data"
class="navigate">
    &emsp;&emsp;&emsp;<b>Useful links: </b><input type="button"
onClick="parent.location='https://www.ncbi.nlm.nih.gov/'" value="NCBI" class="link">
    <input type="button" onClick="parent.location='https://www.ensembl.org/index.html'"
value="Ensembl" class="link">
</footer>

```



```
</html>
```

PhenotypeData_FCG_a.php

```
<html>
```

```
<head>
```

```
<?php  
include("style2.html");  
include("sessioncontrol.php");  
include("header_2.html");  
?>
```

```
<title>MetaboBTT Database/Download Data/Phenotype Data/Female Caregivers</title>
```

```
<style>  
form {  
    width: 700px;  
    margin: 0 auto;  
}  
</style>
```

```
</head>
```

```
<body>
```

```
<h1>MetaboBTT Database</h1>  
<h2>Download Data</h2>  
<h3>Phenotype Data: Female Caregivers</h3>
```

```
<form action="PhenotypeData_FCG_b.php" method = "post">
```

Individuals: All OR <input type="button"
onClick="parent.location='PhenotypeData_FCG_User_a.php'" value="Specify Individuals">

Individual/phenotype data to retrieve:

<input type = "checkbox" name = "check_list[]" value="*">ALL

<input type = "checkbox" name = "check_list[]" value="IndividualID">Individual

ID

<input type = "checkbox" name = "check_list[]" value="Gender">Gender

<input type = "checkbox" name = "check_list[]" value="Ethnicity">Ethnicity

<input type = "checkbox" name = "check_list[]"

value="RelationshipToChild">Relationship To Child

<input type = "checkbox" name = "check_list[]" value="Age_yr13">Age (years)

<input type = "checkbox" name = "check_list[]" value="Height_yr13">Height (m)

<input type = "checkbox" name = "check_list[]" value="Weight_yr13">Weight (kg)

<input type = "checkbox" name = "check_list[]" value="BMI_yr13">BMI (kg/m²)

<input type = "checkbox" name = "check_list[]" value="HipCircumference_yr13">Hip

Circumference (m)

<input type = "checkbox" name = "check_list[]"

value="WaistCircumference_yr13">Waist Circumference (m)

<input type = "checkbox" name = "check_list[]" value="WaistToHipRatio_yr13">Waist

To Hip Ratio

<input type = "checkbox" name = "check_list[]" value="AverageSBP_yr13">Average SBP

(mmHg)

<input type = "checkbox" name = "check_list[]" value="AverageDBP_yr13">Average DBP

(mmHg)

<input type = "checkbox" name = "check_list[]"

value="SubtotalBodyFat_yr13">Subtotal Body Fat (g)

<input type = "checkbox" name = "check_list[]"

value="SubtotalLeanMass_yr13">Subtotal Lean Mass (g)

<input type = "checkbox" name = "check_list[]"

value="PercentageBodyFat_yr13">Percentage Body Fat (%)


```
<b>Criteria:</b></select name = "Criteria">
  <option name = "None" value="">disabled selected hidden>Phenotype</option>
  <option name = "Age" value="1">Age (years)</option>
  <option name = "Height" value="2">Height (m)</option>
  <option name = "Weight" value="3">Weight (kg)</option>
  <option name = "BMI" value="4">BMI (kg/m2)</option>
  <option name = "HipCircumference" value="5">Hip Circumference (m)</option>
  <option name = "WaistCircumference" value="6">Waist Circumference (m)</option>
  <option name = "WaistToHipRatio" value="7">Waist To Hip Ratio</option>
  <option name = "AverageSBP" value="8">Average SBP (mmHg)</option>
  <option name = "AverageDBP" value="9">Average DBP (mmHg)</option>
  <option name = "SubtotalBodyFat" value="10">Subtotal Body Fat (g)</option>
  <option name = "SubtotalLeanMass" value="11">Subtotal Lean Mass (g)</option>
  <option name = "PercentageBodyFat" value="12">Percentage Body Fat (%)</option>
</select>
```

```
<select name = "Operator">
  <option name = "None" value="" disabled selected hidden>Operator</option>
  <option name = "EqualTo" value="="></option>
  <option name = "GreaterThan" value=">"></option>
  <option name = "GreaterThanOrEqualTo" value=">="></option>
  <option name = "LessThan" value="<"></option>
  <option name = "LessThanOrEqualTo" value="<="></option>
</select>
```

e.g.
Average SBP (mmHg) > 130

```
<br>
&emsp;&emsp;&emsp;&emsp;AND
<br>
```

[illegible]


```
    <option name = "Height" value="2">Height (m)</option>
    <option name = "Weight" value="3">Weight (kg)</option>
    <option name = "BMI" value="4">BMI (kg/m2)</option>
    <option name = "HipCircumference" value="5">Hip Circumference (m)</option>
    <option name = "WaistCircumference" value="6">Waist Circumference (m)</option>
    <option name = "WaistToHipRatio" value="7">Waist To Hip Ratio</option>
    <option name = "AverageSBP" value="8">Average SBP (mmHg)</option>
    <option name = "AverageDBP" value="9">Average DBP (mmHg)</option>
    <option name = "SubtotalBodyFat" value="10">Subtotal Body Fat (g)</option>
    <option name = "SubtotalLeanMass" value="11">Subtotal Lean Mass (g)</option>
    <option name = "PercentageBodyFat" value="12">Percentage Body Fat (%)</option>
</select>
```

```
<select name = "Operator3">
    <option name = "None" value="" disabled selected hidden>Operator</option>
    <option name = "EqualTo" value="=">=</option>
    <option name = "GreaterThan" value=">">></option>
    <option name = "GreaterThanOrEqualTo" value=">=">>=</option>
    <option name = "LessThan" value="<"><</option>
    <option name = "LessThanOrEqualTo" value="<="><=</option>
</select>
```

```
<input type="number" step="any" name="CriteriaValue3" placeholder="Enter value">
```

```
<br>
<br>
```

```
<input type = "submit" name = "submit" value = "Print to screen">
<input type = "submit" name = "submit" value = "Save to file (.csv)">
<input type="reset" name="reset" value="Reset">
```

```
</form>
```

```
</body>
```

```
<footer>
```

```

        <input type="button" onClick="parent.location='TitlePage.php'" value="Home" class="navigate">
        <input type="button" onClick="parent.location='DownloadData.php'" value="Download Data"
class="navigate">
        <input type="button" onClick="parent.location='PhenotypeData.php'" value="Phenotype Data"
class="navigate">
        &nbsp;&nbsp;&nbsp;&nbsp;<b>Useful links: </b><input type="button"
onClick="parent.location='https://www.ncbi.nlm.nih.gov/'" value="NCBI" class="link">
        <input type="button" onClick="parent.location='https://www.ensembl.org/index.html'"
value="Ensembl" class="link">
        </footer>

</html>

```

PhenotypeData_FCG_b.php

```

<html>

    <?php
    include("style2.html");
    include("sessioncontrol.php");
    include("config.php");
    ?>

    <style>
    table, th, td {
        border: 1px solid black;
        border-collapse: collapse;
        text-align: center;
        padding: 5px;
    }
    </style>

    <body>

```

```
<?php
```

```
$Phenotype_info=implode(",",$_POST["check_list"]);
$Criteria=$_POST["Criteria"];
    if ($Criteria=="1") {
        $Criteria_value="Age_yr13";
    } elseif($Criteria=="2") {
        $Criteria_value="Height_yr13";
    } elseif($Criteria=="3") {
        $Criteria_value="Weight_yr13";
    } elseif($Criteria=="4") {
        $Criteria_value="BMI_yr13";
    } elseif($Criteria=="5") {
        $Criteria_value="HipCircumference_yr13";
    } elseif($Criteria=="6") {
        $Criteria_value="WaistCircumference_yr13";
    } elseif($Criteria=="7") {
        $Criteria_value="WaistToHipRatio_yr13";
    } elseif($Criteria=="8") {
        $Criteria_value="AverageSBP_yr13";
    } elseif($Criteria=="9") {
        $Criteria_value="AverageDBP_yr13";
    } elseif($Criteria=="10") {
        $Criteria_value="SubtotalBodyFat_yr13";
    } elseif($Criteria=="11") {
        $Criteria_value="SubtotalLeanMass_yr13";
    } elseif ($Criteria=="12") {
        $Criteria_value="PercentageBodyFat_yr13";
    }
$Operator=$_POST["Operator"];
$CriteriaValue=$_POST["CriteriaValue"];
$Criteria2=$_POST["Criteria2"];
    if ($Criteria2=="1") {
        $Criteria2_value="AND Age_yr13";
    } elseif($Criteria2=="2") {
        $Criteria2_value="AND Height_yr13";
```

```
} elseif($Criteria2=="3") {
    $Criteria2_value="AND Weight_yr13";
} elseif($Criteria2=="4") {
    $Criteria2_value="AND BMI_yr13";
} elseif($Criteria2=="5") {
    $Criteria2_value="AND HipCircumference_yr13";
} elseif($Criteria2=="6") {
    $Criteria2_value="AND WaistCircumference_yr13";
} elseif($Criteria2=="7") {
    $Criteria2_value="AND WaistToHipRatio_yr13";
} elseif($Criteria2=="8") {
    $Criteria2_value="AND AverageSBP_yr13";
} elseif($Criteria2=="9") {
    $Criteria2_value="AND AverageDBP_yr13";
} elseif($Criteria2=="10") {
    $Criteria2_value="AND SubtotalBodyFat_yr13";
} elseif($Criteria2=="11") {
    $Criteria2_value="AND SubtotalLeanMass_yr13";
} elseif ($Criteria2=="12") {
    $Criteria2_value="AND PercentageBodyFat_yr13";
}
$Operator2=$_POST["Operator2"];
$CriteriaValue2=$_POST["CriteriaValue2"];
$Criteria3=$_POST["Criteria3"];
if ($Criteria3=="1") {
    $Criteria3_value="AND Age_yr13";
} elseif($Criteria3=="2") {
    $Criteria3_value="AND Height_yr13";
} elseif($Criteria3=="3") {
    $Criteria3_value="AND Weight_yr13";
} elseif($Criteria3=="4") {
    $Criteria3_value="AND BMI_yr13";
} elseif($Criteria3=="5") {
    $Criteria3_value="AND HipCircumference_yr13";
} elseif($Criteria3=="6") {
    $Criteria3_value="AND WaistCircumference_yr13";
```



```

    } elseif($Criteria3=="7") {
        $Criteria3_value="AND WaistToHipRatio_yr13";
    } elseif($Criteria3=="8") {
        $Criteria3_value="AND AverageSBP_yr13";
    } elseif($Criteria3=="9") {
        $Criteria3_value="AND AverageDBP_yr13";
    } elseif($Criteria3=="10") {
        $Criteria3_value="AND SubtotalBodyFat_yr13";
    } elseif($Criteria3=="11") {
        $Criteria3_value="AND SubtotalLeanMass_yr13";
    } elseif($Criteria3=="12") {
        $Criteria3_value="AND PercentageBodyFat_yr13";
    }
}
$Operator3=$_POST["Operator3"];
$criteriaValue3=$_POST["CriteriaValue3"];
$Retrieve=$_POST["submit"];

if($_POST["Criteria"]=="") {
    $sql = "SELECT $Phenotype_info FROM female_caregivers_basic NATURAL JOIN
phenotype_yr13_female_caregivers";
} else {
    $sql = "SELECT $Phenotype_info FROM female_caregivers_basic NATURAL JOIN
phenotype_yr13_female_caregivers WHERE $Criteria_value $Operator $CriteriaValue $Criteria2_value
$Operator2 $CriteriaValue2 $Criteria3_value $Operator3 $CriteriaValue3";
}

$result = $conn->query($sql);

include("print_or_save.php");

if (!isset($Phenotype_info)) {
    echo "Make sure you have selected some options of what to retrieve!";
} else {
    $row_cnt = $result->num_rows;
    echo "<strong>$row_cnt result(s) matched the selected criteria</strong><br><br>";
    echo '</table>';
}

```

```
    }

    $conn->close();
?>

</body>

</html>
```

PhenotypeData_FCG_User_a.php

```
<html>

    <head>

        <?php
        include("style2.html");
        include("sessioncontrol.php");
        include("header_2.html");
        ?>

        <title>MetaboBTT Database/Download Data/Phenotype Data/Female Caregivers</title>

        <style>
        form {
            width: 500px;
            margin: 0 auto;
        }
        </style>

    </head>

    <body>
```

<h1>MetaboBTT Database</h1>

<h2>Download Data</h2>

<h3>Phenotype Data: Female Caregivers</h3>

<form action="PhenotypeData_FCG_User_b.php" method = "post" enctype="multipart/form-data">

Individuals: <input type="text" name="Individuals" placeholder="Enter Individual ID"> OR <input type="file" name="Individuals">

Individual/phenotype data to retrieve:

<input type = "checkbox" name = "check_list[]" value="*">ALL

<input type = "checkbox" name = "check_list[]" value="IndividualID">Individual ID

<input type = "checkbox" name = "check_list[]" value="Gender">Gender

<input type = "checkbox" name = "check_list[]" value="Ethnicity">Ethnicity

<input type = "checkbox" name = "check_list[]" value="RelationshipToChild">Relationship To Child

<input type = "checkbox" name = "check_list[]" value="Age_yr13">Age (years)

<input type = "checkbox" name = "check_list[]" value="Height_yr13">Height (m)

<input type = "checkbox" name = "check_list[]" value="Weight_yr13">Weight (kg)

<input type = "checkbox" name = "check_list[]" value="BMI_yr13">BMI (kg/m²)

<input type = "checkbox" name = "check_list[]" value="HipCircumference_yr13">Hip Circumference (m)

<input type = "checkbox" name = "check_list[]" value="WaistCircumference_yr13">Waist Circumference (m)

<input type = "checkbox" name = "check_list[]" value="WaistToHipRatio_yr13">Waist To Hip Ratio

<input type = "checkbox" name = "check_list[]" value="AverageSBP_yr13">Average SBP (mmHg)

<input type = "checkbox" name = "check_list[]" value="AverageDBP_yr13">Average DBP (mmHg)

<input type = "checkbox" name = "check_list[]" value="SubtotalBodyFat_yr13">Subtotal Body Fat (g)


```

                <input type = "checkbox" name = "check_list[]"
value="SubtotalLeanMass_yr13">Subtotal Lean Mass (g)<br>
                <input type = "checkbox" name = "check_list[]"
value="PercentageBodyFat_yr13">Percentage Body Fat (%)

                <br>
                <br>

                <input type = "submit" name = "submit" value = "Print to screen">
                <input type = "submit" name = "submit" value = "Save to file (.csv)">
                <input type="reset" name="reset" value="Reset">
                <input type="button" onClick="parent.location='PhenotypeData_FCG_a.php'"
value="Back">

        </form>

</body>

<footer>
        <input type="button" onClick="parent.location='TitlePage.php'" value="Home" class="navigate">
        <input type="button" onClick="parent.location='DownloadData.php'" value="Download Data"
class="navigate">
        <input type="button" onClick="parent.location='PhenotypeData.php'" value="Phenotype Data"
class="navigate">
        &emsp;&emsp;&emsp;<b>Useful links: </b><input type="button"
onClick="parent.location='https://www.ncbi.nlm.nih.gov/'" value="NCBI" class="link">
        <input type="button" onClick="parent.location='https://www.ensembl.org/index.html'"
value="Ensembl" class="link">
</footer>

</html>

```

PhenotypeData_FCG_User_b.php

```
<html>
```

```
<?php
include("style2.html");
include("sessioncontrol.php");
include("config.php");
?>
```

```
<style>
table, th, td {
    border: 1px solid black;
    border-collapse: collapse;
    text-align: center;
    padding: 5px;
}
</style>
```

```
<body>
```

```
<?php

$Phenotype_info=implode(",",$_POST["check_list"]);
$Retrieve=$_POST["submit"];

$myfile = fopen($_FILES["Individuals"]["tmp_name"], "rb");
$FileType = pathinfo(basename($_FILES["Individuals"]["name"]),PATHINFO_EXTENSION);

if($_POST["Individuals"]=="" AND file_exists($_FILES["Individuals"]["tmp_name"])) {

    if ($FileType == "txt") {

        while(($content= fgets($myfile)) !==false){
            $content2=trim($content);
            $content3[]="'$content2'";
        }
        $content4=implode(",", $content3);
```

```

        fclose($myfile);

        $sql = "SELECT $Phenotype_info FROM female_caregivers_basic NATURAL JOIN
phenotype_yr13_female_caregivers WHERE IndividualID IN ($content4)";

        } else {
            echo "Make sure the file you are trying to upload is a text file!";
        }

    } elseif($_POST["Individuals"]!=" " AND !file_exists($_FILES["Individuals"]["tmp_name"])) {

        $Individuals=$_POST["Individuals"];
        $sql = "SELECT $Phenotype_info FROM female_caregivers_basic NATURAL JOIN
phenotype_yr13_female_caregivers WHERE IndividualID IN ('$Individuals')";
    }

    $result = $conn->query($sql);

    include("print_or_save.php");

    $row_cnt = $result->num_rows;

    if($_POST["Individuals"]==" " AND !file_exists($_FILES["Individuals"]["tmp_name"])) {
        echo "Please specify either a single individual ID or upload a file of individual IDs.";

    } elseif($_POST["Individuals"]!=" " AND file_exists($_FILES["Individuals"]["tmp_name"])) {
        echo "Please specify either a single individual ID or upload a file of individual IDs
(not both).";

    } elseif (($_POST["Individuals"]!=" " OR file_exists($_FILES["Individuals"]["tmp_name"])) AND
!isset($Phenotype_info)) {
        echo "Make sure you have selected some options of what to retrieve!";

    } elseif ($row_cnt>0 AND isset($Phenotype_info)) {
        echo "<strong>$row_cnt result(s) matched the selected criteria</strong><br><br>";
    }

```

```

        echo '</table>';

    } elseif ($row_cnt==0) {
        echo "<strong>0 result(s) matched the selected criteria</strong><br><br>";
    }

    $conn->close();
?>

</body>

</html>

```

PhenotypeData_BTTP_a.php

```

<html>

    <head>

        <?php
        include("style2.html");
        include("sessioncontrol.php");
        include("header_2.html");
        ?>

        <title>MetaboBTT Database/Download Data/Phenotype Data/Bt20 Participants</title>

        <style>
        form {
            width: 950px;
            margin: 0 auto;
        }
        table, th {
            border: 1px solid black;

```

```

        border-collapse: collapse;
        text-align: center;
        padding: 5px;
    }
    td {
        border: 1px solid black;
        border-collapse: collapse;
        text-align: left;
        padding: 5px;
    }
</style>

</head>

<body>

    <h1>MetaboBTT Database</h1>
    <h2>Download Data</h2>
    <h3>Phenotype Data: Bt20 Participants</h3>

    <form action="PhenotypeData_BTTP_b.php" method = "post">

        <b>Individuals:</b><select name = "Individual">
            <option name = "all" value="all">All</option>
            <option name = "males" value="1">Males</option>
            <option name = "females" value="2">Females</option>
        </select>

        OR <input type="button" onClick="parent.location='PhenotypeData_BTTP_User_a.php'"
value="Specify Individuals">

        <br>
        <br>

        <b>Individual/phenotype data to retrieve:</b><br><br>
        <input type = "checkbox" name = "check_list[]" value="*">ALL<br>

```


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ID

	DATA COLLECTION TIME POINT													
PHENOTYPE	Year 5	Year 7	Year 9/10	Year 11/12	Year 13	Year 14	Year 15	Year 16	Year 17/18	Year 19	Year 20			
Age (years)	<input name="check_list[]" type="checkbox" value="Age_yr5, Age_yr7, Age_yr910, Age_yr1112, Age_yr13, Age_yr14, Age_yr15, Age_yr16, Age_yr1718, Age_yr19, Age_yr20"/>												<input name="check_list[]" type="checkbox" value="Age_yr5"/> <input name="check_list[]" type="checkbox" value="Age_yr7"/>	

```

value="Age_yr910"></th>
value="Age_yr1112"></th>
value="Age_yr1718"></th>
</tr>
<tr>
<td>Height (m)</td>
<th><input type = "checkbox" name = "check_list[]" value="Height_yr5,
Height_yr7, Height_yr910, Height_yr1112, Height_yr13, Height_yr14, Height_yr15, Height_yr16,
Height_yr1718, Height_yr19, Height_yr20"></th>
<th><input type = "checkbox" name = "check_list[]"
value="Height_yr5"></th>
<th><input type = "checkbox" name = "check_list[]"
value="Height_yr7"></th>
<th><input type = "checkbox" name = "check_list[]"
value="Height_yr910"></th>
<th><input type = "checkbox" name = "check_list[]"
value="Height_yr1112"></th>
<th><input type = "checkbox" name = "check_list[]"
value="Height_yr13"></th>
<th><input type = "checkbox" name = "check_list[]"
value="Height_yr14"></th>
<th><input type = "checkbox" name = "check_list[]"
value="Height_yr15"></th>
<th><input type = "checkbox" name = "check_list[]"
value="Height_yr16"></th>
<th><input type = "checkbox" name = "check_list[]"
value="Age_yr13"></th>
<th><input type = "checkbox" name = "check_list[]" value="Age_yr14"></th>
<th><input type = "checkbox" name = "check_list[]" value="Age_yr15"></th>
<th><input type = "checkbox" name = "check_list[]" value="Age_yr16"></th>
<th><input type = "checkbox" name = "check_list[]" value="Age_yr19"></th>
<th><input type = "checkbox" name = "check_list[]" value="Age_yr20"></th>
</tr>

```

value="Height_yr1718"></th>	<th><input type = "checkbox" name = "check_list[]"
value="Height_yr19"></th>	<th><input type = "checkbox" name = "check_list[]"
value="Height_yr20"></th>	<th><input type = "checkbox" name = "check_list[]"
</tr>	
<tr>	<td>Weight (kg)</td>
Weight_yr7, Weight_yr910, Weight_yr1112, Weight_yr13, Weight_yr14, Weight_yr15, Weight_yr16, Weight_yr1718, Weight_yr19, Weight_yr20"></th>	<th><input type = "checkbox" name = "check_list[]" value="Weight_yr5,
value="Weight_yr5"></th>	<th><input type = "checkbox" name = "check_list[]"
value="Weight_yr7"></th>	<th><input type = "checkbox" name = "check_list[]"
value="Weight_yr910"></th>	<th><input type = "checkbox" name = "check_list[]"
value="Weight_yr1112"></th>	<th><input type = "checkbox" name = "check_list[]"
value="Weight_yr13"></th>	<th><input type = "checkbox" name = "check_list[]"
value="Weight_yr14"></th>	<th><input type = "checkbox" name = "check_list[]"
value="Weight_yr15"></th>	<th><input type = "checkbox" name = "check_list[]"
value="Weight_yr16"></th>	<th><input type = "checkbox" name = "check_list[]"
value="Weight_yr1718"></th>	<th><input type = "checkbox" name = "check_list[]"
value="Weight_yr19"></th>	<th><input type = "checkbox" name = "check_list[]"
value="Weight_yr20"></th>	<th><input type = "checkbox" name = "check_list[]"
</tr>	

	<div> <div>BMI (kg/m²)</div> <div> <input type="checkbox"/> BMI_yr5, BMI_yr7, BMI_yr910, BMI_yr1112, BMI_yr13, BMI_yr14, BMI_yr15, BMI_yr16, BMI_yr1718, BMI_yr19, BMI_yr20 </div> <div> <input type="checkbox"/> BMI_yr5 </div> <div> <input type="checkbox"/> BMI_yr7 </div> <div> <input type="checkbox"/> BMI_yr910 </div> <div> <input type="checkbox"/> BMI_yr1112 </div> <div> <input type="checkbox"/> BMI_yr13 </div> <div> <input type="checkbox"/> BMI_yr14 </div> <div> <input type="checkbox"/> BMI_yr15 </div> <div> <input type="checkbox"/> BMI_yr16 </div> <div> <input type="checkbox"/> BMI_yr1718 </div> <div> <input type="checkbox"/> BMI_yr19 </div> <div> <input type="checkbox"/> BMI_yr20 </div> </div>
	<div> <div>Hip Circumference (m)</div> <div> <input type="checkbox"/> HipCircumference_yr5, HipCircumference_yr7, HipCircumference_yr910, HipCircumference_yr1112, HipCircumference_yr13, HipCircumference_yr14, HipCircumference_yr15, HipCircumference_yr16, HipCircumference_yr1718, HipCircumference_yr19, HipCircumference_yr20 </div> <div> <input type="checkbox"/> HipCircumference_yr5 </div> <div> <input type="checkbox"/> HipCircumference_yr7 </div> <div> <input type="checkbox"/> HipCircumference_yr910 </div> <div> <input type="checkbox"/> HipCircumference_yr1112 </div> </div>

```

                <th><input type = "checkbox" name = "check_list[]"
value="HipCircumference_yr13"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="HipCircumference_yr14"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="HipCircumference_yr15"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="HipCircumference_yr16"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="HipCircumference_yr1718"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="HipCircumference_yr19"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="HipCircumference_yr20"></th>
            </tr>

            <tr>
                <td>Waist Circumference (m)</td>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistCircumference_yr5, WaistCircumference_yr7, WaistCircumference_yr910,
WaistCircumference_yr1112, WaistCircumference_yr13, WaistCircumference_yr14, WaistCircumference_yr15,
WaistCircumference_yr16, WaistCircumference_yr1718, WaistCircumference_yr19,
WaistCircumference_yr20"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistCircumference_yr5"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistCircumference_yr7"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistCircumference_yr910"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistCircumference_yr1112"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistCircumference_yr13"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistCircumference_yr14"></th>

```

```
 <th><input type = "checkbox" name = "check_list[]" value="WaistCircumference_yr15"></th>  <th><input type = "checkbox" name = "check_list[]" value="WaistCircumference_yr16"></th>  <th><input type = "checkbox" name = "check_list[]" value="WaistCircumference_yr1718"></th>  <th><input type = "checkbox" name = "check_list[]" value="WaistCircumference_yr19"></th>  <th><input type = "checkbox" name = "check_list[]" value="WaistCircumference_yr20"></th> </tr>  <tr> <td>Waist to Hip Ratio</td>  <th><input type = "checkbox" name = "check_list[]" value="WaistToHipRatio_yr5, WaistToHipRatio_yr7, WaistToHipRatio_yr910, WaistToHipRatio_yr1112, WaistToHipRatio_yr13, WaistToHipRatio_yr14, WaistToHipRatio_yr15, WaistToHipRatio_yr16, WaistToHipRatio_yr1718, WaistToHipRatio_yr19, WaistToHipRatio_yr20"></th>  <th><input type = "checkbox" name = "check_list[]" value="WaistToHipRatio_yr5"></th>  <th><input type = "checkbox" name = "check_list[]" value="WaistToHipRatio_yr7"></th>  <th><input type = "checkbox" name = "check_list[]" value="WaistToHipRatio_yr910"></th>  <th><input type = "checkbox" name = "check_list[]" value="WaistToHipRatio_yr1112"></th>  <th><input type = "checkbox" name = "check_list[]" value="WaistToHipRatio_yr13"></th>  <th><input type = "checkbox" name = "check_list[]" value="WaistToHipRatio_yr14"></th>  <th><input type = "checkbox" name = "check_list[]" value="WaistToHipRatio_yr15"></th>  <th><input type = "checkbox" name = "check_list[]" value="WaistToHipRatio_yr16"></th>  <th><input type = "checkbox" name = "check_list[]" value="WaistToHipRatio_yr1718"></th> | | | | | | | | | | | | | | |
```

	<th><input type = "checkbox" name = "check_list[]" value="WaistToHipRatio_yr19"></th>
	<th><input type = "checkbox" name = "check_list[]" value="WaistToHipRatio_yr20"></th>
	</tr>
<tr>	<td>Average SBP (mmHg)</td>
AverageSBP_yr7, AverageSBP_yr910, AverageSBP_yr1112, AverageSBP_yr13, AverageSBP_yr14, AverageSBP_yr15, AverageSBP_yr16, AverageSBP_yr1718, AverageSBP_yr19, AverageSBP_yr20"></th>	<th><input type = "checkbox" name = "check_list[]" value="AverageSBP_yr5,"></th>
value="AverageSBP_yr5"></th>	<th><input type = "checkbox" name = "check_list[]" value="AverageSBP_yr7,"></th>
value="AverageSBP_yr7"></th>	<th><input type = "checkbox" name = "check_list[]" value="AverageSBP_yr910,"></th>
value="AverageSBP_yr910"></th>	<th><input type = "checkbox" name = "check_list[]" value="AverageSBP_yr1112,"></th>
value="AverageSBP_yr1112"></th>	<th><input type = "checkbox" name = "check_list[]" value="AverageSBP_yr13,"></th>
value="AverageSBP_yr13"></th>	<th><input type = "checkbox" name = "check_list[]" value="AverageSBP_yr14,"></th>
value="AverageSBP_yr14"></th>	<th><input type = "checkbox" name = "check_list[]" value="AverageSBP_yr15,"></th>
value="AverageSBP_yr15"></th>	<th><input type = "checkbox" name = "check_list[]" value="AverageSBP_yr16,"></th>
value="AverageSBP_yr16"></th>	<th><input type = "checkbox" name = "check_list[]" value="AverageSBP_yr1718,"></th>
value="AverageSBP_yr1718"></th>	<th><input type = "checkbox" name = "check_list[]" value="AverageSBP_yr19,"></th>
value="AverageSBP_yr19"></th>	<th><input type = "checkbox" name = "check_list[]" value="AverageSBP_yr20"></th>
value="AverageSBP_yr20"></th>	</tr>
</tr>	

	<td>Average DBP (mmHg)</td> <td> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr5, AverageDBP_yr7, AverageDBP_yr910, AverageDBP_yr1112, AverageDBP_yr13, AverageDBP_yr14, AverageDBP_yr15, AverageDBP_yr16, AverageDBP_yr1718, AverageDBP_yr19, AverageDBP_yr20"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr5"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr7"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr910"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1112"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr13"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr14"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr15"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr16"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th></th></th></th></th></th></th></th></th></th></th></td> </td>	Average DBP (mmHg)</td> <td> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr5, AverageDBP_yr7, AverageDBP_yr910, AverageDBP_yr1112, AverageDBP_yr13, AverageDBP_yr14, AverageDBP_yr15, AverageDBP_yr16, AverageDBP_yr1718, AverageDBP_yr19, AverageDBP_yr20"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr5"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr7"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr910"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1112"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr13"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr14"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr15"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr16"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th></th></th></th></th></th></th></th></th></th></th></td>	<th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr5, AverageDBP_yr7, AverageDBP_yr910, AverageDBP_yr1112, AverageDBP_yr13, AverageDBP_yr14, AverageDBP_yr15, AverageDBP_yr16, AverageDBP_yr1718, AverageDBP_yr19, AverageDBP_yr20"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr5"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr7"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr910"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1112"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr13"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr14"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr15"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr16"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th></th></th></th></th></th></th></th></th></th></th>	<input type = "checkbox" name = "check_list[]" value="AverageDBP_yr5, AverageDBP_yr7, AverageDBP_yr910, AverageDBP_yr1112, AverageDBP_yr13, AverageDBP_yr14, AverageDBP_yr15, AverageDBP_yr16, AverageDBP_yr1718, AverageDBP_yr19, AverageDBP_yr20"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr5"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr7"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr910"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1112"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr13"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr14"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr15"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr16"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th></th></th></th></th></th></th></th></th></th>	<input type = "checkbox" name = "check_list[]" value="AverageDBP_yr5"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr7"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr910"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1112"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr13"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr14"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr15"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr16"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th></th></th></th></th></th></th></th></th>	<input type = "checkbox" name = "check_list[]" value="AverageDBP_yr7"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr910"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1112"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr13"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr14"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr15"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr16"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th></th></th></th></th></th></th></th>	<input type = "checkbox" name = "check_list[]" value="AverageDBP_yr910"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1112"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr13"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr14"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr15"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr16"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th></th></th></th></th></th></th>	<input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1112"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr13"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr14"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr15"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr16"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th></th></th></th></th></th>	<input type = "checkbox" name = "check_list[]" value="AverageDBP_yr13"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr14"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr15"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr16"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th></th></th></th></th>	<input type = "checkbox" name = "check_list[]" value="AverageDBP_yr14"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr15"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr16"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th></th></th></th>	<input type = "checkbox" name = "check_list[]" value="AverageDBP_yr15"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr16"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th></th></th>	<input type = "checkbox" name = "check_list[]" value="AverageDBP_yr16"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th></th>	<input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th>	<input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th>	<input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th>
	</tr>														
	<td>Subtotal Body Fat (g)</td> <td> <th><input type = "checkbox" name = "check_list[]" value="SubtotalBodyFat_yr5, SubtotalBodyFat_yr7, SubtotalBodyFat_yr910, SubtotalBodyFat_yr1112, SubtotalBodyFat_yr13, SubtotalBodyFat_yr14, SubtotalBodyFat_yr15, SubtotalBodyFat_yr16, SubtotalBodyFat_yr1718, SubtotalBodyFat_yr19, SubtotalBodyFat_yr20"></th> <th><input type = "checkbox" name = "check_list[]" value="SubtotalBodyFat_yr5"></th> </th></th></td> </td>	Subtotal Body Fat (g)</td> <td> <th><input type = "checkbox" name = "check_list[]" value="SubtotalBodyFat_yr5, SubtotalBodyFat_yr7, SubtotalBodyFat_yr910, SubtotalBodyFat_yr1112, SubtotalBodyFat_yr13, SubtotalBodyFat_yr14, SubtotalBodyFat_yr15, SubtotalBodyFat_yr16, SubtotalBodyFat_yr1718, SubtotalBodyFat_yr19, SubtotalBodyFat_yr20"></th> <th><input type = "checkbox" name = "check_list[]" value="SubtotalBodyFat_yr5"></th> </th></th></td>	<th><input type = "checkbox" name = "check_list[]" value="SubtotalBodyFat_yr5, SubtotalBodyFat_yr7, SubtotalBodyFat_yr910, SubtotalBodyFat_yr1112, SubtotalBodyFat_yr13, SubtotalBodyFat_yr14, SubtotalBodyFat_yr15, SubtotalBodyFat_yr16, SubtotalBodyFat_yr1718, SubtotalBodyFat_yr19, SubtotalBodyFat_yr20"></th> <th><input type = "checkbox" name = "check_list[]" value="SubtotalBodyFat_yr5"></th> </th></th>	<input type = "checkbox" name = "check_list[]" value="SubtotalBodyFat_yr5, SubtotalBodyFat_yr7, SubtotalBodyFat_yr910, SubtotalBodyFat_yr1112, SubtotalBodyFat_yr13, SubtotalBodyFat_yr14, SubtotalBodyFat_yr15, SubtotalBodyFat_yr16, SubtotalBodyFat_yr1718, SubtotalBodyFat_yr19, SubtotalBodyFat_yr20"></th> <th><input type = "checkbox" name = "check_list[]" value="SubtotalBodyFat_yr5"></th> </th>	<input type = "checkbox" name = "check_list[]" value="SubtotalBodyFat_yr5"></th>										

value="SubtotalBodyFat_yr7"></td>	<th><input type = "checkbox" name = "check_list[]"
value="SubtotalBodyFat_yr910"></td>	<th><input type = "checkbox" name = "check_list[]"
value="SubtotalBodyFat_yr1112"></td>	<th><input type = "checkbox" name = "check_list[]"
value="SubtotalBodyFat_yr13"></td>	<th><input type = "checkbox" name = "check_list[]"
value="SubtotalBodyFat_yr14"></td>	<th><input type = "checkbox" name = "check_list[]"
value="SubtotalBodyFat_yr15"></td>	<th><input type = "checkbox" name = "check_list[]"
value="SubtotalBodyFat_yr16"></td>	<th><input type = "checkbox" name = "check_list[]"
value="SubtotalBodyFat_yr1718"></td>	<th><input type = "checkbox" name = "check_list[]"
value="SubtotalBodyFat_yr19"></td>	<th><input type = "checkbox" name = "check_list[]"
value="SubtotalBodyFat_yr20"></td>	<th><input type = "checkbox" name = "check_list[]"

<tr>	<td>Subtotal Lean Mass (g)</td>
value="SubtotalLeanMass_yr5, SubtotalLeanMass_yr7, SubtotalLeanMass_yr910, SubtotalLeanMass_yr1112, SubtotalLeanMass_yr13, SubtotalLeanMass_yr14, SubtotalLeanMass_yr15, SubtotalLeanMass_yr16, SubtotalLeanMass_yr1718, SubtotalLeanMass_yr19, SubtotalLeanMass_yr20"></td>	<th><input type = "checkbox" name = "check_list[]"
value="SubtotalLeanMass_yr5"></td>	<th><input type = "checkbox" name = "check_list[]"
value="SubtotalLeanMass_yr7"></td>	<th><input type = "checkbox" name = "check_list[]"
value="SubtotalLeanMass_yr910"></td>	<th><input type = "checkbox" name = "check_list[]"
value="SubtotalLeanMass_yr1112"></td>	<th><input type = "checkbox" name = "check_list[]"

SubtotalLeanMass_yr13	<input type="checkbox"/>
SubtotalLeanMass_yr14	<input type="checkbox"/>
SubtotalLeanMass_yr15	<input type="checkbox"/>
SubtotalLeanMass_yr16	<input type="checkbox"/>
SubtotalLeanMass_yr1718	<input type="checkbox"/>
SubtotalLeanMass_yr19	<input type="checkbox"/>
SubtotalLeanMass_yr20	<input type="checkbox"/>
Percentage Body Fat (%)	
PercentageBodyFat_yr5, PercentageBodyFat_yr7, PercentageBodyFat_yr910, PercentageBodyFat_yr1112, PercentageBodyFat_yr13, PercentageBodyFat_yr14, PercentageBodyFat_yr15, PercentageBodyFat_yr16, PercentageBodyFat_yr1718, PercentageBodyFat_yr19, PercentageBodyFat_yr20	<input type="checkbox"/>
PercentageBodyFat_yr5	<input type="checkbox"/>
PercentageBodyFat_yr7	<input type="checkbox"/>
PercentageBodyFat_yr910	<input type="checkbox"/>
PercentageBodyFat_yr1112	<input type="checkbox"/>
PercentageBodyFat_yr13	<input type="checkbox"/>
PercentageBodyFat_yr14	<input type="checkbox"/>
PercentageBodyFat_yr15	<input type="checkbox"/>

<th> <input name="check_list[]" type="checkbox" value="PercentageBodyFat_yr16"/> </th>	<input name="check_list[]" type="checkbox" value="PercentageBodyFat_yr16"/>
<th> <input name="check_list[]" type="checkbox" value="PercentageBodyFat_yr17"/> </th>	<input name="check_list[]" type="checkbox" value="PercentageBodyFat_yr17"/>
<th> <input name="check_list[]" type="checkbox" value="PercentageBodyFat_yr18"/> </th>	<input name="check_list[]" type="checkbox" value="PercentageBodyFat_yr18"/>
<th> <input name="check_list[]" type="checkbox" value="PercentageBodyFat_yr19"/> </th>	<input name="check_list[]" type="checkbox" value="PercentageBodyFat_yr19"/>
<th> <input name="check_list[]" type="checkbox" value="PercentageBodyFat_yr20"/> </th>	<input name="check_list[]" type="checkbox" value="PercentageBodyFat_yr20"/>


```

        <option name = "13" value="5">Year 13</option>
        <option name = "14" value="6">Year 14</option>
        <option name = "15" value="7">Year 15</option>
        <option name = "16" value="8">Year 16</option>
        <option name = "17/18" value="9">Year 17/18</option>
        <option name = "19" value="10">Year 19</option>
        <option name = "20" value="11">Year 20</option>
    </select>

    <select name = "Criteria2">
        <option name = "None" value="" disabled selected hidden>Phenotype</option>
        <option name = "Age" value="1">Age (years)</option>
        <option name = "Height" value="2">Height (m)</option>
        <option name = "Weight" value="3">Weight (kg)</option>
        <option name = "BMI" value="4">BMI (kg/m2)</option>
        <option name = "HipCircumference" value="5">Hip Circumference (m)</option>
        <option name = "WaistCircumference" value="6">Waist Circumference (m)</option>
        <option name = "WaistToHipRatio" value="7">Waist To Hip Ratio</option>
        <option name = "AverageSBP" value="8">Average SBP (mmHg)</option>
        <option name = "AverageDBP" value="9">Average DBP (mmHg)</option>
        <option name = "SubtotalBodyFat" value="10">Subtotal Body Fat (g)</option>
        <option name = "SubtotalLeanMass" value="11">Subtotal Lean Mass (g)</option>
        <option name = "PercentageBodyFat" value="12">Percentage Body Fat (%)</option>
    </select>

    <select name = "Operator2">
        <option name = "None" value="" disabled selected hidden>Operator</option>
        <option name = "EqualTo" value="=">=</option>
        <option name = "GreaterThan" value=">">></option>
        <option name = "GreaterThanOrEqualTo" value=">=">>=</option>
        <option name = "LessThan" value="<"><</option>
        <option name = "LessThanOrEqualTo" value="<="><=</option>
    </select>

    <input type="number" step="any" name="CriteriaValue2" placeholder="Enter value">

```



```

</select>

<select name = "Operator3">
    <option name = "None" value="" disabled selected hidden>Operator</option>
    <option name = "EqualTo" value="="></option>
    <option name = "GreaterThan" value=">"></option>
    <option name = "GreaterThanOrEqualTo" value=">="></option>
    <option name = "LessThan" value="<"></option>
    <option name = "LessThanOrEqualTo" value="<="></option>
</select>

<input type="number" step="any" name="CriteriaValue3" placeholder="Enter value">

<br>
<br>

<input type = "submit" name = "submit" value = "Print to screen">
<input type = "submit" name = "submit" value = "Save to file (.csv)">
<input type="reset" name="reset" value="Reset">

</form>

</body>

<footer>
    <input type="button" onClick="parent.location='TitlePage.php'" value="Home" class="navigate">
    <input type="button" onClick="parent.location='DownloadData.php'" value="Download Data"
class="navigate">
    <input type="button" onClick="parent.location='PhenotypeData.php'" value="Phenotype Data"
class="navigate">
    &nbsp;&nbsp;&nbsp;&nbsp;<b>Useful links:</b><input type="button"
onClick="parent.location='https://www.ncbi.nlm.nih.gov/'" value="NCBI" class="link">
    <input type="button" onClick="parent.location='https://www.ensembl.org/index.html'"
value="Ensembl" class="link">
</footer>

```

```
</html>
```

PhenotypeData_BTTP_b.php

```
<html>
```

```
<?php
include("style2.html");
include("sessioncontrol.php");
include("config.php");
?>
```

```
<style>
table, th, td {
    border: 1px solid black;
    border-collapse: collapse;
    text-align: center;
    padding: 5px;
}
</style>
```

```
<body>
```

```
<?php

$Gender=$_POST["Individual"];
    if($Gender=="1") {
        $Gender_name="males";
    } elseif ($Gender=="2") {
        $Gender_name="females";
    }

$Phenotype_info=implode(",",$_POST["check_list"]);
```



```
$Year=$_POST["Year"];
    if($Year=="1") {
        $Year_add="_yr5";
    } elseif($Year=="2") {
        $Year_add="_yr7";
    } elseif($Year=="3") {
        $Year_add="_yr910";
    } elseif($Year=="4") {
        $Year_add="_yr1112";
    } elseif($Year=="5") {
        $Year_add="_yr13";
    } elseif($Year=="6") {
        $Year_add="_yr14";
    } elseif($Year=="7") {
        $Year_add="_yr15";
    } elseif($Year=="8") {
        $Year_add="_yr16";
    } elseif($Year=="9") {
        $Year_add="_yr1718";
    } elseif($Year=="10") {
        $Year_add="_yr19";
    } elseif($Year=="11") {
        $Year_add="_yr20";
    }
}
$Criteria=$_POST["Criteria"];
    if ($Criteria=="1") {
        $Criteria_value="Age";
    } elseif($Criteria=="2") {
        $Criteria_value="Height";
    } elseif($Criteria=="3") {
        $Criteria_value="Weight";
    } elseif($Criteria=="4") {
        $Criteria_value="BMI";
    } elseif($Criteria=="5") {
        $Criteria_value="HipCircumference";
    } elseif($Criteria=="6") {
```

```
        $Criteria_value="WaistCircumference";
    } elseif($Criteria=="7") {
        $Criteria_value="WaistToHipRatio";
    } elseif($Criteria=="8") {
        $Criteria_value="AverageSBP";
    } elseif($Criteria=="9") {
        $Criteria_value="AverageDBP";
    } elseif($Criteria=="10") {
        $Criteria_value="SubtotalBodyFat";
    } elseif($Criteria=="11") {
        $Criteria_value="SubtotalLeanMass";
    } elseif ($Criteria=="12") {
        $Criteria_value="PercentageBodyFat";
    }
}
$Operator=$_POST["Operator"];
$CriteriaValue=$_POST["CriteriaValue"];
$Year2=$_POST["Year2"];
    if($Year2=="1") {
        $Year2_add="_yr5";
    } elseif($Year2=="2") {
        $Year2_add="_yr7";
    } elseif($Year2=="3") {
        $Year2_add="_yr910";
    } elseif($Year2=="4") {
        $Year2_add="_yr1112";
    } elseif($Year2=="5") {
        $Year2_add="_yr13";
    } elseif($Year2=="6") {
        $Year2_add="_yr14";
    } elseif($Year2=="7") {
        $Year2_add="_yr15";
    } elseif($Year2=="8") {
        $Year2_add="_yr16";
    } elseif($Year2=="9") {
        $Year2_add="_yr1718";
    } elseif($Year2=="10") {
```

```

        $Year2_add="_yr19";
    } elseif($Year2=="11") {
        $Year2_add="_yr20";
    }
$Criteria2=$_POST["Criteria2"];
if ($Criteria2=="1") {
    $Criteria2_value="AND Age";
} elseif($Criteria2=="2") {
    $Criteria2_value="AND Height";
} elseif($Criteria2=="3") {
    $Criteria2_value="AND Weight";
} elseif($Criteria2=="4") {
    $Criteria2_value="AND BMI";
} elseif($Criteria2=="5") {
    $Criteria2_value="AND HipCircumference";
} elseif($Criteria2=="6") {
    $Criteria2_value="AND WaistCircumference";
} elseif($Criteria2=="7") {
    $Criteria2_value="AND WaistToHipRatio";
} elseif($Criteria2=="8") {
    $Criteria2_value="AND AverageSBP";
} elseif($Criteria2=="9") {
    $Criteria2_value="AND AverageDBP";
} elseif($Criteria2=="10") {
    $Criteria2_value="AND SubtotalBodyFat";
} elseif($Criteria2=="11") {
    $Criteria2_value="AND SubtotalLeanMass";
} elseif ($Criteria2=="12") {
    $Criteria2_value="AND PercentageBodyFat";
}
$Operator2=$_POST["Operator2"];
$CriteriaValue2=$_POST["CriteriaValue2"];
$Year3=$_POST["Year3"];
if($Year3=="1") {
    $Year3_add="_yr5";
} elseif($Year3=="2") {

```

```

        $Year3_add="_yr7";
    } elseif($Year3=="3") {
        $Year3_add="_yr910";
    } elseif($Year3=="4") {
        $Year3_add="_yr1112";
    } elseif($Year3=="5") {
        $Year3_add="_yr13";
    } elseif($Year3=="6") {
        $Year3_add="_yr14";
    } elseif($Year3=="7") {
        $Year3_add="_yr15";
    } elseif($Year3=="8") {
        $Year3_add="_yr16";
    } elseif($Year3=="9") {
        $Year3_add="_yr1718";
    } elseif($Year3=="10") {
        $Year3_add="_yr19";
    } elseif($Year3=="11") {
        $Year3_add="_yr20";
    }
}
$Criteria3=$_POST["Criteria3"];
if ($Criteria3=="1") {
    $Criteria3_value="AND Age";
} elseif($Criteria3=="2") {
    $Criteria3_value="AND Height";
} elseif($Criteria3=="3") {
    $Criteria3_value="AND Weight";
} elseif($Criteria3=="4") {
    $Criteria3_value="AND BMI";
} elseif($Criteria3=="5") {
    $Criteria3_value="AND HipCircumference";
} elseif($Criteria3=="6") {
    $Criteria3_value="AND WaistCircumference";
} elseif($Criteria3=="7") {
    $Criteria3_value="AND WaistToHipRatio";
} elseif($Criteria3=="8") {

```

```

        $Criteria3_value="AND AverageSBP";
    } elseif($Criteria3=="9") {
        $Criteria3_value="AND AverageDBP";
    } elseif($Criteria3=="10") {
        $Criteria3_value="AND SubtotalBodyFat";
    } elseif($Criteria3=="11") {
        $Criteria3_value="AND SubtotalLeanMass";
    } elseif($Criteria3=="12") {
        $Criteria3_value="AND PercentageBodyFat";
    }
}
$Operator3=$_POST["Operator3"];
$criteriaValue3=$_POST["CriteriaValue3"];
$Retrieve=$_POST["submit"];

if($_POST["Criteria"]=="" AND $_POST["Criteria2"]=="" AND $_POST["Criteria3"]=="") {

    if($_POST["Individual"]=="all") {
        $sql = "SELECT $Phenotype_info FROM bt20_participants_basic NATURAL JOIN
phenotype_yr5_bt20_participants NATURAL JOIN phenotype_yr7_bt20_participants NATURAL JOIN
phenotype_yr910_bt20_participants NATURAL JOIN phenotype_yr1112_bt20_participants NATURAL JOIN
phenotype_yr13_bt20_participants NATURAL JOIN phenotype_yr14_bt20_participants NATURAL JOIN
phenotype_yr15_bt20_participants NATURAL JOIN phenotype_yr16_bt20_participants NATURAL JOIN
phenotype_yr1718_bt20_participants NATURAL JOIN phenotype_yr19_bt20_participants NATURAL JOIN
phenotype_yr20_bt20_participants";

    } else {
        $sql = "SELECT $Phenotype_info FROM bt20_participants_basic NATURAL JOIN
phenotype_yr5_bt20_participants NATURAL JOIN phenotype_yr7_bt20_participants NATURAL JOIN
phenotype_yr910_bt20_participants NATURAL JOIN phenotype_yr1112_bt20_participants NATURAL JOIN
phenotype_yr13_bt20_participants NATURAL JOIN phenotype_yr14_bt20_participants NATURAL JOIN
phenotype_yr15_bt20_participants NATURAL JOIN phenotype_yr16_bt20_participants NATURAL JOIN
phenotype_yr1718_bt20_participants NATURAL JOIN phenotype_yr19_bt20_participants NATURAL JOIN
phenotype_yr20_bt20_participants WHERE Gender=$Gender";

    }
}

```

```

    } elseif($_POST["Criteria2"]==" AND $_POST["Criteria3"]==" ) {

        if($_POST["Individual"]=="all") {
            $sql = "SELECT $Phenotype_info FROM bt20_participants_basic NATURAL JOIN
phenotype_yr5_bt20_participants NATURAL JOIN phenotype_yr7_bt20_participants NATURAL JOIN
phenotype_yr910_bt20_participants NATURAL JOIN phenotype_yr1112_bt20_participants NATURAL JOIN
phenotype_yr13_bt20_participants NATURAL JOIN phenotype_yr14_bt20_participants NATURAL JOIN
phenotype_yr15_bt20_participants NATURAL JOIN phenotype_yr16_bt20_participants NATURAL JOIN
phenotype_yr1718_bt20_participants NATURAL JOIN phenotype_yr19_bt20_participants NATURAL JOIN
phenotype_yr20_bt20_participants WHERE $Criteria_value$Year_add $Operator $CriteriaValue";

        } else {
            $sql = "SELECT $Phenotype_info FROM bt20_participants_basic NATURAL JOIN
phenotype_yr5_bt20_participants NATURAL JOIN phenotype_yr7_bt20_participants NATURAL JOIN
phenotype_yr910_bt20_participants NATURAL JOIN phenotype_yr1112_bt20_participants NATURAL JOIN
phenotype_yr13_bt20_participants NATURAL JOIN phenotype_yr14_bt20_participants NATURAL JOIN
phenotype_yr15_bt20_participants NATURAL JOIN phenotype_yr16_bt20_participants NATURAL JOIN
phenotype_yr1718_bt20_participants NATURAL JOIN phenotype_yr19_bt20_participants NATURAL JOIN
phenotype_yr20_bt20_participants WHERE Gender=$Gender AND $Criteria_value$Year_add $Operator
$CriteriaValue";

        }
    } elseif($_POST["Criteria3"]==" ) {

        if($_POST["Individual"]=="all") {
            $sql = "SELECT $Phenotype_info FROM bt20_participants_basic NATURAL JOIN
phenotype_yr5_bt20_participants NATURAL JOIN phenotype_yr7_bt20_participants NATURAL JOIN
phenotype_yr910_bt20_participants NATURAL JOIN phenotype_yr1112_bt20_participants NATURAL JOIN
phenotype_yr13_bt20_participants NATURAL JOIN phenotype_yr14_bt20_participants NATURAL JOIN
phenotype_yr15_bt20_participants NATURAL JOIN phenotype_yr16_bt20_participants NATURAL JOIN
phenotype_yr1718_bt20_participants NATURAL JOIN phenotype_yr19_bt20_participants NATURAL JOIN
phenotype_yr20_bt20_participants WHERE $Criteria_value$Year_add $Operator $CriteriaValue
$Criteria2_value$Year2_add $Operator2 $CriteriaValue2";

        } else {

```

```

        $sql = "SELECT $Phenotype_info FROM bt20_participants_basic NATURAL JOIN
phenotype_yr5_bt20_participants NATURAL JOIN phenotype_yr7_bt20_participants NATURAL JOIN
phenotype_yr910_bt20_participants NATURAL JOIN phenotype_yr1112_bt20_participants NATURAL JOIN
phenotype_yr13_bt20_participants NATURAL JOIN phenotype_yr14_bt20_participants NATURAL JOIN
phenotype_yr15_bt20_participants NATURAL JOIN phenotype_yr16_bt20_participants NATURAL JOIN
phenotype_yr1718_bt20_participants NATURAL JOIN phenotype_yr19_bt20_participants NATURAL JOIN
phenotype_yr20_bt20_participants WHERE Gender=$Gender AND $Criteria_value$Year_add $Operator
$CriteriaValue $Criteria2_value$Year2_add $Operator2 $CriteriaValue2";

```

```

    }
} else {

```

```

    if($_POST["Individual"]=="all") {
        $sql = "SELECT $Phenotype_info FROM bt20_participants_basic NATURAL JOIN
phenotype_yr5_bt20_participants NATURAL JOIN phenotype_yr7_bt20_participants NATURAL JOIN
phenotype_yr910_bt20_participants NATURAL JOIN phenotype_yr1112_bt20_participants NATURAL JOIN
phenotype_yr13_bt20_participants NATURAL JOIN phenotype_yr14_bt20_participants NATURAL JOIN
phenotype_yr15_bt20_participants NATURAL JOIN phenotype_yr16_bt20_participants NATURAL JOIN
phenotype_yr1718_bt20_participants NATURAL JOIN phenotype_yr19_bt20_participants NATURAL JOIN
phenotype_yr20_bt20_participants WHERE $Criteria_value$Year_add $Operator $CriteriaValue
$Criteria2_value$Year2_add $Operator2 $CriteriaValue2 $Criteria3_value$Year3_add $Operator3
$CriteriaValue3";

```

```

    } else {
        $sql = "SELECT $Phenotype_info FROM bt20_participants_basic NATURAL JOIN
phenotype_yr5_bt20_participants NATURAL JOIN phenotype_yr7_bt20_participants NATURAL JOIN
phenotype_yr910_bt20_participants NATURAL JOIN phenotype_yr1112_bt20_participants NATURAL JOIN
phenotype_yr13_bt20_participants NATURAL JOIN phenotype_yr14_bt20_participants NATURAL JOIN
phenotype_yr15_bt20_participants NATURAL JOIN phenotype_yr16_bt20_participants NATURAL JOIN
phenotype_yr1718_bt20_participants NATURAL JOIN phenotype_yr19_bt20_participants NATURAL JOIN
phenotype_yr20_bt20_participants WHERE Gender=$Gender AND $Criteria_value$Year_add $Operator
$CriteriaValue $Criteria2_value$Year2_add $Operator2 $CriteriaValue2 $Criteria3_value$Year3_add
$Operator3 $CriteriaValue3";

```

```

    }
}

```

```

$result = $conn->query($sql);

include("print_or_save.php");

if (!isset($Phenotype_info)) {
    echo "Make sure you have selected some options of what to retrieve!";
} else {
    $row_cnt = $result->num_rows;
    echo "<strong>$row_cnt result(s) matched the selected criteria</strong><br><br>";
    echo '</table>';
}

$conn->close();
?>

```

</body>

</html>

PhenotypeData_BTTP_User_a.php

<html>

<head>

```

<?php
include("style2.html");
include("sessioncontrol.php");
include("header_2.html");
?>

```

<title>MetaboBTT Database/Download Data/Phenotype Data/Bt20 Participants</title>

<style>


```

form {
    width: 950px;
    margin: 0 auto;
}
table, th {
    border: 1px solid black;
    border-collapse: collapse;
    text-align: center;
    padding: 5px;
}
td {
    border: 1px solid black;
    border-collapse: collapse;
    text-align: left;
    padding: 5px;
}
</style>

```

</head>

<body>

```

<h1>MetaboBTT Database</h1>
<h2>Download Data</h2>
<h3>Phenotype Data: Bt20 Participants</h3>

```

```

<form action="PhenotypeData_BTTP_User_b.php" method = "post" enctype="multipart/form-data">

```

```

    <b>Individuals: </b><input type="text" name="Individuals" placeholder="Enter Individual
ID"> OR <input type="file" name="Individuals">

```

```

    <br>

```

```

    <br>

```

```

    <b>Individual/phenotype data to retrieve:</b><br><br>

```

```

        <input type = "checkbox" name = "check_list[]" value="*">ALL<br>

```

☐
☐
☐
☐
ID

| | DATA COLLECTION TIME POINT | | | | | | | | | | | | |
|-----------|----------------------------|--------|-----------|------------|---------|---------|---------|---------|------------|---------|---------|-------------|---|
| PHENOTYPE | Year 5 | Year 7 | Year 9/10 | Year 11/12 | Year 13 | Year 14 | Year 15 | Year 16 | Year 17/18 | Year 19 | Year 20 | Age (years) | Age_yr5, Age_yr7, Age_yr910, Age_yr1112, Age_yr13, Age_yr14, Age_yr15, Age_yr16, Age_yr1718, Age_yr19, Age_yr20" |
| ALL | | | | | | | | | | | | | <input >age_yr5
="" >age_yr7="" <="" <input="" name="check_list[]" td="" type="checkbox" value="Age_yr7"/> |

```

value="Age_yr910"></th>
value="Age_yr1112"></th>
value="Age_yr1718"></th>
</tr>
<tr>
<td>Height (m)</td>
<th><input type = "checkbox" name = "check_list[]" value="Height_yr5,
Height_yr7, Height_yr910, Height_yr1112, Height_yr13, Height_yr14, Height_yr15, Height_yr16,
Height_yr1718, Height_yr19, Height_yr20"></th>
<th><input type = "checkbox" name = "check_list[]"
value="Height_yr5"></th>
<th><input type = "checkbox" name = "check_list[]"
value="Height_yr7"></th>
<th><input type = "checkbox" name = "check_list[]"
value="Height_yr910"></th>
<th><input type = "checkbox" name = "check_list[]"
value="Height_yr1112"></th>
<th><input type = "checkbox" name = "check_list[]"
value="Height_yr13"></th>
<th><input type = "checkbox" name = "check_list[]"
value="Height_yr14"></th>
<th><input type = "checkbox" name = "check_list[]"
value="Height_yr15"></th>
<th><input type = "checkbox" name = "check_list[]"
value="Height_yr16"></th>

```

| | |
|---|---|
| value="Height_yr1718"></th> | <th><input type = "checkbox" name = "check_list[]" |
| value="Height_yr19"></th> | <th><input type = "checkbox" name = "check_list[]" |
| value="Height_yr20"></th> | <th><input type = "checkbox" name = "check_list[]" |
| </tr> | |
| <tr> | <td>Weight (kg)</td> |
| Weight_yr7, Weight_yr910, Weight_yr1112, Weight_yr13, Weight_yr14, Weight_yr15, Weight_yr16, Weight_yr1718, Weight_yr19, Weight_yr20"></th> | <th><input type = "checkbox" name = "check_list[]" value="Weight_yr5, |
| value="Weight_yr5"></th> | <th><input type = "checkbox" name = "check_list[]" |
| value="Weight_yr7"></th> | <th><input type = "checkbox" name = "check_list[]" |
| value="Weight_yr910"></th> | <th><input type = "checkbox" name = "check_list[]" |
| value="Weight_yr1112"></th> | <th><input type = "checkbox" name = "check_list[]" |
| value="Weight_yr13"></th> | <th><input type = "checkbox" name = "check_list[]" |
| value="Weight_yr14"></th> | <th><input type = "checkbox" name = "check_list[]" |
| value="Weight_yr15"></th> | <th><input type = "checkbox" name = "check_list[]" |
| value="Weight_yr16"></th> | <th><input type = "checkbox" name = "check_list[]" |
| value="Weight_yr1718"></th> | <th><input type = "checkbox" name = "check_list[]" |
| value="Weight_yr19"></th> | <th><input type = "checkbox" name = "check_list[]" |
| value="Weight_yr20"></th> | <th><input type = "checkbox" name = "check_list[]" |
| </tr> | |

| | |
|--|--|
| | <div> <div>BMI (kg/m²)</div> <div> <input type="checkbox"/> BMI_yr5, BMI_yr7, BMI_yr910, BMI_yr1112, BMI_yr13, BMI_yr14, BMI_yr15, BMI_yr16, BMI_yr1718, BMI_yr19, BMI_yr20 </div> <div> <input type="checkbox"/> BMI_yr5 </div> <div> <input type="checkbox"/> BMI_yr7 </div> <div> <input type="checkbox"/> BMI_yr910 </div> <div> <input type="checkbox"/> BMI_yr1112 </div> <div> <input type="checkbox"/> BMI_yr13 </div> <div> <input type="checkbox"/> BMI_yr14 </div> <div> <input type="checkbox"/> BMI_yr15 </div> <div> <input type="checkbox"/> BMI_yr16 </div> <div> <input type="checkbox"/> BMI_yr1718 </div> <div> <input type="checkbox"/> BMI_yr19 </div> <div> <input type="checkbox"/> BMI_yr20 </div> </div> |
| | <div> <div>Hip Circumference (m)</div> <div> <input type="checkbox"/> HipCircumference_yr5, HipCircumference_yr7, HipCircumference_yr910, HipCircumference_yr1112, HipCircumference_yr13, HipCircumference_yr14, HipCircumference_yr15, HipCircumference_yr16, HipCircumference_yr1718, HipCircumference_yr19, HipCircumference_yr20 </div> <div> <input type="checkbox"/> HipCircumference_yr5 </div> <div> <input type="checkbox"/> HipCircumference_yr7 </div> <div> <input type="checkbox"/> HipCircumference_yr910 </div> <div> <input type="checkbox"/> HipCircumference_yr1112 </div> </div> |

```

                <th><input type = "checkbox" name = "check_list[]"
value="HipCircumference_yr13"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="HipCircumference_yr14"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="HipCircumference_yr15"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="HipCircumference_yr16"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="HipCircumference_yr1718"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="HipCircumference_yr19"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="HipCircumference_yr20"></th>
            </tr>

            <tr>
                <td>Waist Circumference (m)</td>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistCircumference_yr5, WaistCircumference_yr7, WaistCircumference_yr910,
WaistCircumference_yr1112, WaistCircumference_yr13, WaistCircumference_yr14, WaistCircumference_yr15,
WaistCircumference_yr16, WaistCircumference_yr1718, WaistCircumference_yr19,
WaistCircumference_yr20"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistCircumference_yr5"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistCircumference_yr7"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistCircumference_yr910"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistCircumference_yr1112"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistCircumference_yr13"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistCircumference_yr14"></th>

```

```

                <th><input type = "checkbox" name = "check_list[]"
value="WaistCircumference_yr15"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistCircumference_yr16"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistCircumference_yr1718"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistCircumference_yr19"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistCircumference_yr20"></th>
            </tr>

            <tr>
                <td>Waist to Hip Ratio</td>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistToHipRatio_yr5, WaistToHipRatio_yr7, WaistToHipRatio_yr910, WaistToHipRatio_yr1112,
WaistToHipRatio_yr13, WaistToHipRatio_yr14, WaistToHipRatio_yr15, WaistToHipRatio_yr16,
WaistToHipRatio_yr1718, WaistToHipRatio_yr19, WaistToHipRatio_yr20"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistToHipRatio_yr5"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistToHipRatio_yr7"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistToHipRatio_yr910"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistToHipRatio_yr1112"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistToHipRatio_yr13"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistToHipRatio_yr14"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistToHipRatio_yr15"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistToHipRatio_yr16"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="WaistToHipRatio_yr1718"></th>

```

| | |
|---|---|
| | <th><input type = "checkbox" name = "check_list[]" value="WaistToHipRatio_yr19"></th> |
| | <th><input type = "checkbox" name = "check_list[]" value="WaistToHipRatio_yr20"></th> |
| | </tr> |
| <tr> | |
| | <td>Average SBP (mmHg)</td> |
| AverageSBP_yr7, AverageSBP_yr910, AverageSBP_yr1112, AverageSBP_yr13, AverageSBP_yr14, AverageSBP_yr15, AverageSBP_yr16, AverageSBP_yr1718, AverageSBP_yr19, AverageSBP_yr20"></th> | <th><input type = "checkbox" name = "check_list[]" value="AverageSBP_yr5,"></th> |
| value="AverageSBP_yr5"></th> | <th><input type = "checkbox" name = "check_list[]" value="AverageSBP_yr7,"></th> |
| value="AverageSBP_yr7"></th> | <th><input type = "checkbox" name = "check_list[]" value="AverageSBP_yr910,"></th> |
| value="AverageSBP_yr910"></th> | <th><input type = "checkbox" name = "check_list[]" value="AverageSBP_yr1112,"></th> |
| value="AverageSBP_yr1112"></th> | <th><input type = "checkbox" name = "check_list[]" value="AverageSBP_yr13,"></th> |
| value="AverageSBP_yr13"></th> | <th><input type = "checkbox" name = "check_list[]" value="AverageSBP_yr14,"></th> |
| value="AverageSBP_yr14"></th> | <th><input type = "checkbox" name = "check_list[]" value="AverageSBP_yr15,"></th> |
| value="AverageSBP_yr15"></th> | <th><input type = "checkbox" name = "check_list[]" value="AverageSBP_yr16,"></th> |
| value="AverageSBP_yr16"></th> | <th><input type = "checkbox" name = "check_list[]" value="AverageSBP_yr1718,"></th> |
| value="AverageSBP_yr1718"></th> | <th><input type = "checkbox" name = "check_list[]" value="AverageSBP_yr19,"></th> |
| value="AverageSBP_yr19"></th> | <th><input type = "checkbox" name = "check_list[]" value="AverageSBP_yr20"></th> |
| value="AverageSBP_yr20"></th> | </tr> |
| </tr> | |

| | <td>Average DBP (mmHg)</td> <td> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr5, AverageDBP_yr7, AverageDBP_yr910, AverageDBP_yr1112, AverageDBP_yr13, AverageDBP_yr14, AverageDBP_yr15, AverageDBP_yr16, AverageDBP_yr1718, AverageDBP_yr19, AverageDBP_yr20"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr5"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr7"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr910"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1112"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr13"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr14"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr15"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr16"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th></th></th></th></th></th></th></th></th></th></th></td> </td> | Average DBP (mmHg)</td> <td> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr5, AverageDBP_yr7, AverageDBP_yr910, AverageDBP_yr1112, AverageDBP_yr13, AverageDBP_yr14, AverageDBP_yr15, AverageDBP_yr16, AverageDBP_yr1718, AverageDBP_yr19, AverageDBP_yr20"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr5"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr7"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr910"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1112"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr13"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr14"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr15"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr16"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th></th></th></th></th></th></th></th></th></th></th></td> | <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr5, AverageDBP_yr7, AverageDBP_yr910, AverageDBP_yr1112, AverageDBP_yr13, AverageDBP_yr14, AverageDBP_yr15, AverageDBP_yr16, AverageDBP_yr1718, AverageDBP_yr19, AverageDBP_yr20"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr5"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr7"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr910"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1112"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr13"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr14"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr15"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr16"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th></th></th></th></th></th></th></th></th></th></th> | <input type = "checkbox" name = "check_list[]" value="AverageDBP_yr5, AverageDBP_yr7, AverageDBP_yr910, AverageDBP_yr1112, AverageDBP_yr13, AverageDBP_yr14, AverageDBP_yr15, AverageDBP_yr16, AverageDBP_yr1718, AverageDBP_yr19, AverageDBP_yr20"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr5"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr7"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr910"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1112"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr13"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr14"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr15"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr16"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th></th></th></th></th></th></th></th></th></th> | <input type = "checkbox" name = "check_list[]" value="AverageDBP_yr5"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr7"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr910"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1112"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr13"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr14"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr15"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr16"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th></th></th></th></th></th></th></th></th> | <input type = "checkbox" name = "check_list[]" value="AverageDBP_yr7"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr910"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1112"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr13"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr14"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr15"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr16"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th></th></th></th></th></th></th></th> | <input type = "checkbox" name = "check_list[]" value="AverageDBP_yr910"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1112"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr13"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr14"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr15"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr16"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th></th></th></th></th></th></th> | <input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1112"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr13"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr14"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr15"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr16"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th></th></th></th></th></th> | <input type = "checkbox" name = "check_list[]" value="AverageDBP_yr13"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr14"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr15"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr16"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th></th></th></th></th> | <input type = "checkbox" name = "check_list[]" value="AverageDBP_yr14"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr15"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr16"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th></th></th></th> | <input type = "checkbox" name = "check_list[]" value="AverageDBP_yr15"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr16"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th></th></th> | <input type = "checkbox" name = "check_list[]" value="AverageDBP_yr16"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th></th> | <input type = "checkbox" name = "check_list[]" value="AverageDBP_yr1718"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th></th> | <input type = "checkbox" name = "check_list[]" value="AverageDBP_yr19"></th> <th><input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> </th> | <input type = "checkbox" name = "check_list[]" value="AverageDBP_yr20"></th> |
|--|--|--|--|---|--|---|--|---|---|---|---|---|---|---|--|
| | </tr> | | | | | | | | | | | | | | |
| | <td>Subtotal Body Fat (g)</td> <td> <th><input type = "checkbox" name = "check_list[]" value="SubtotalBodyFat_yr5, SubtotalBodyFat_yr7, SubtotalBodyFat_yr910, SubtotalBodyFat_yr1112, SubtotalBodyFat_yr13, SubtotalBodyFat_yr14, SubtotalBodyFat_yr15, SubtotalBodyFat_yr16, SubtotalBodyFat_yr1718, SubtotalBodyFat_yr19, SubtotalBodyFat_yr20"></th> <th><input type = "checkbox" name = "check_list[]" value="SubtotalBodyFat_yr5"></th> </th></th></td> </td> | Subtotal Body Fat (g)</td> <td> <th><input type = "checkbox" name = "check_list[]" value="SubtotalBodyFat_yr5, SubtotalBodyFat_yr7, SubtotalBodyFat_yr910, SubtotalBodyFat_yr1112, SubtotalBodyFat_yr13, SubtotalBodyFat_yr14, SubtotalBodyFat_yr15, SubtotalBodyFat_yr16, SubtotalBodyFat_yr1718, SubtotalBodyFat_yr19, SubtotalBodyFat_yr20"></th> <th><input type = "checkbox" name = "check_list[]" value="SubtotalBodyFat_yr5"></th> </th></th></td> | <th><input type = "checkbox" name = "check_list[]" value="SubtotalBodyFat_yr5, SubtotalBodyFat_yr7, SubtotalBodyFat_yr910, SubtotalBodyFat_yr1112, SubtotalBodyFat_yr13, SubtotalBodyFat_yr14, SubtotalBodyFat_yr15, SubtotalBodyFat_yr16, SubtotalBodyFat_yr1718, SubtotalBodyFat_yr19, SubtotalBodyFat_yr20"></th> <th><input type = "checkbox" name = "check_list[]" value="SubtotalBodyFat_yr5"></th> </th></th> | <input type = "checkbox" name = "check_list[]" value="SubtotalBodyFat_yr5, SubtotalBodyFat_yr7, SubtotalBodyFat_yr910, SubtotalBodyFat_yr1112, SubtotalBodyFat_yr13, SubtotalBodyFat_yr14, SubtotalBodyFat_yr15, SubtotalBodyFat_yr16, SubtotalBodyFat_yr1718, SubtotalBodyFat_yr19, SubtotalBodyFat_yr20"></th> <th><input type = "checkbox" name = "check_list[]" value="SubtotalBodyFat_yr5"></th> </th> | <input type = "checkbox" name = "check_list[]" value="SubtotalBodyFat_yr5"></th> | | | | | | | | | | |

```

        <th><input type = "checkbox" name = "check_list[]"
value="SubtotalBodyFat_yr7"></th>
        <th><input type = "checkbox" name = "check_list[]"
value="SubtotalBodyFat_yr910"></th>
        <th><input type = "checkbox" name = "check_list[]"
value="SubtotalBodyFat_yr1112"></th>
        <th><input type = "checkbox" name = "check_list[]"
value="SubtotalBodyFat_yr13"></th>
        <th><input type = "checkbox" name = "check_list[]"
value="SubtotalBodyFat_yr14"></th>
        <th><input type = "checkbox" name = "check_list[]"
value="SubtotalBodyFat_yr15"></th>
        <th><input type = "checkbox" name = "check_list[]"
value="SubtotalBodyFat_yr16"></th>
        <th><input type = "checkbox" name = "check_list[]"
value="SubtotalBodyFat_yr1718"></th>
        <th><input type = "checkbox" name = "check_list[]"
value="SubtotalBodyFat_yr19"></th>
        <th><input type = "checkbox" name = "check_list[]"
value="SubtotalBodyFat_yr20"></th>
    </tr>

    <tr>
        <td>Subtotal Lean Mass (g)</td>
        <th><input type = "checkbox" name = "check_list[]"
value="SubtotalLeanMass_yr5, SubtotalLeanMass_yr7, SubtotalLeanMass_yr910, SubtotalLeanMass_yr1112,
SubtotalLeanMass_yr13, SubtotalLeanMass_yr14, SubtotalLeanMass_yr15, SubtotalLeanMass_yr16,
SubtotalLeanMass_yr1718, SubtotalLeanMass_yr19, SubtotalLeanMass_yr20"></th>
        <th><input type = "checkbox" name = "check_list[]"
value="SubtotalLeanMass_yr5"></th>
        <th><input type = "checkbox" name = "check_list[]"
value="SubtotalLeanMass_yr7"></th>
        <th><input type = "checkbox" name = "check_list[]"
value="SubtotalLeanMass_yr910"></th>
        <th><input type = "checkbox" name = "check_list[]"
value="SubtotalLeanMass_yr1112"></th>

```

| | |
|---|--------------------------|
| SubtotalLeanMass_yr13 | <input type="checkbox"/> |
| SubtotalLeanMass_yr14 | <input type="checkbox"/> |
| SubtotalLeanMass_yr15 | <input type="checkbox"/> |
| SubtotalLeanMass_yr16 | <input type="checkbox"/> |
| SubtotalLeanMass_yr1718 | <input type="checkbox"/> |
| SubtotalLeanMass_yr19 | <input type="checkbox"/> |
| SubtotalLeanMass_yr20 | <input type="checkbox"/> |
| Percentage Body Fat (%) | |
| PercentageBodyFat_yr5, PercentageBodyFat_yr7, PercentageBodyFat_yr910, PercentageBodyFat_yr1112, PercentageBodyFat_yr13, PercentageBodyFat_yr14, PercentageBodyFat_yr15, PercentageBodyFat_yr16, PercentageBodyFat_yr1718, PercentageBodyFat_yr19, PercentageBodyFat_yr20 | <input type="checkbox"/> |
| PercentageBodyFat_yr5 | <input type="checkbox"/> |
| PercentageBodyFat_yr7 | <input type="checkbox"/> |
| PercentageBodyFat_yr910 | <input type="checkbox"/> |
| PercentageBodyFat_yr1112 | <input type="checkbox"/> |
| PercentageBodyFat_yr13 | <input type="checkbox"/> |
| PercentageBodyFat_yr14 | <input type="checkbox"/> |
| PercentageBodyFat_yr15 | <input type="checkbox"/> |

```

                <th><input type = "checkbox" name = "check_list[]"
value="PercentageBodyFat_yr16"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="PercentageBodyFat_yr1718"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="PercentageBodyFat_yr19"></th>
                <th><input type = "checkbox" name = "check_list[]"
value="PercentageBodyFat_yr20"></th>
            </tr>

        </table>

        <br>
        <br>

        <input type = "submit" name = "submit" value = "Print to screen">
        <input type = "submit" name = "submit" value = "Save to file (.csv)">
        <input type="reset" name="reset" value="Reset">
        <input type="button" onClick="parent.location='PhenotypeData_BTTP_a.php'"
value="Back">

        </form>

    </body>

    <footer>
        <input type="button" onClick="parent.location='TitlePage.php'" value="Home" class="navigate">
        <input type="button" onClick="parent.location='DownloadData.php'" value="Download Data"
class="navigate">
        <input type="button" onClick="parent.location='PhenotypeData.php'" value="Phenotype Data"
class="navigate">
        &emsp;&emsp;&emsp;&emsp;<b>Useful links: </b><input type="button"
onClick="parent.location='https://www.ncbi.nlm.nih.gov/'" value="NCBI" class="link">
        <input type="button" onClick="parent.location='https://www.ensembl.org/index.html'"
value="Ensembl" class="link">
    </footer>

```

```
</html>
```

PhenotypeData_BTTP_User_b.php

```
<html>
```

```
<?php
include("style2.html");
include("sessioncontrol.php");
include("config.php");
?>
```

```
<style>
table, th, td {
    border: 1px solid black;
    border-collapse: collapse;
    text-align: center;
    padding: 5px;
}
</style>
```

```
<body>
```

```
<?php
```

```
#EXTRACT ALL OR SPECIFIC PHENOTYPE DATA FOR SPECIFIC INDIVIDUALS FROM THE BT20 PARTICIPANT DATASET
```

```
$Phenotype_info=implode(",",$_POST["check_list"]);
$Retrieve=$_POST["submit"];
```

```
$myfile = fopen($_FILES["Individuals"]["tmp_name"], "rb");
$FileType = pathinfo(basename($_FILES["Individuals"]["name"]),PATHINFO_EXTENSION);
```

```

if($_POST["Individuals"]=="" AND file_exists($_FILES["Individuals"]["tmp_name"])) {

    if ($FileType == "txt") {

        while(($content= fgets($myfile)) !==false){
            $content2=trim($content);
            $content3[]="'$content2'";
        }
        $content4=implode(",",$content3);

        fclose($myfile);

        $sql = "SELECT $Phenotype_info FROM bt20_participants_basic NATURAL JOIN
phenotype_yr5_bt20_participants NATURAL JOIN phenotype_yr7_bt20_participants NATURAL JOIN
phenotype_yr910_bt20_participants NATURAL JOIN phenotype_yr1112_bt20_participants NATURAL JOIN
phenotype_yr13_bt20_participants NATURAL JOIN phenotype_yr14_bt20_participants NATURAL JOIN
phenotype_yr15_bt20_participants NATURAL JOIN phenotype_yr16_bt20_participants NATURAL JOIN
phenotype_yr1718_bt20_participants NATURAL JOIN phenotype_yr19_bt20_participants NATURAL JOIN
phenotype_yr20_bt20_participants WHERE IndividualID IN ($content4)";

    } else {
        echo "Make sure the file you are trying to upload is a text file!";
    }
}

if($_POST["Individuals"]!="" AND !file_exists($_FILES["Individuals"]["tmp_name"])) {

    $Individuals=$_POST["Individuals"];
    $sql = "SELECT $Phenotype_info FROM bt20_participants_basic NATURAL JOIN
phenotype_yr5_bt20_participants NATURAL JOIN phenotype_yr7_bt20_participants NATURAL JOIN
phenotype_yr910_bt20_participants NATURAL JOIN phenotype_yr1112_bt20_participants NATURAL JOIN
phenotype_yr13_bt20_participants NATURAL JOIN phenotype_yr14_bt20_participants NATURAL JOIN
phenotype_yr15_bt20_participants NATURAL JOIN phenotype_yr16_bt20_participants NATURAL JOIN
phenotype_yr1718_bt20_participants NATURAL JOIN phenotype_yr19_bt20_participants NATURAL JOIN
phenotype_yr20_bt20_participants WHERE IndividualID IN ('$Individuals')";
}

```

```

$result = $conn->query($sql);

include("print_or_save.php");

$row_cnt = $result->num_rows;

if($_POST["Individuals"]==" " AND !file_exists($_FILES["Individuals"]["tmp_name"])) {
    echo "Please specify either a single individual ID or upload a file of individual IDs.";

} elseif($_POST["Individuals"]!=" " AND file_exists($_FILES["Individuals"]["tmp_name"])) {
    echo "Please specify either a single individual ID or upload a file of individual IDs
(not both).";

} elseif (($_POST["Individuals"]!=" " OR file_exists($_FILES["Individuals"]["tmp_name"])) AND
!isset($Phenotype_info)) {
    echo "Make sure you have selected some options of what to retrieve!";

} elseif ($row_cnt>0 AND isset($Phenotype_info)) {
    echo "<strong>$row_cnt result(s) matched the selected criteria</strong><br><br>";
    echo '</table>';

} elseif ($row_cnt==0) {
    echo "<strong>0 result(s) matched the selected criteria</strong><br><br>";
}

$conn->close();
?>

</body>

</html>

```

Metabochip Data Download Page

MetabochipData_a.php

```
<html>

    <head>

        <?php
        include("style2.html");
        include("sessioncontrol.php");
        include("header_2.html");
        ?>

        <title>MetaboBTT Database/Download Data/Metabochip Data</title>

        <style>
        form {
            width: 700px;
            margin: 0 auto;
        }
        </style>

    </head>

    <body>

        <h1>MetaboBTT Database</h1>
        <h2>Download Data</h2>
        <h3>Metabochip Data</h3>

        <form action = "MetabochipData_b.php" method="post" enctype="multipart/form-data">

            <b>Filter by:</b><select name = "Filter">
```



```

        <option name = "SNPID36" value="1">Build 36 SNP ID</option>
        <option name = "SNPID37" value="2">Build 37 SNP ID</option>
        <option name = "BP36" value="3">Build 36 base pair position</option>
        <option name = "BP37" value="4">Build 37 base pair position</option>
        <option name = "Gene" value="5">Gene</option>
        <option name = "Chromosome" value="6">Chromosome</option>
        <option name = "LocationWithinGene" value="7">Location within gene</option>
    </select>

    <input type="text" name="Filter2" placeholder="Enter value"> OR <input type="file"
name="Filter2">

    <br>
    <br>

    <b>SNP-related information to retrieve:</b><br><br>
        <input type = "checkbox" name = "check_list[]" value="*">ALL<br>
        <input type = "checkbox" name = "check_list[]" value="SNPID36">Build 36 SNP ID<br>
        <input type = "checkbox" name = "check_list[]" value="SNPID37">Build 37 SNP ID<br>
        <input type = "checkbox" name = "check_list[]" value="Chromosome">Chromosome<br>
        <input type = "checkbox" name = "check_list[]" value="BasePairPosition36">Build 36
base pair position<br>
        <input type = "checkbox" name = "check_list[]" value="BasePairPosition37">Build 37
base pair position<br>
        <input type = "checkbox" name = "check_list[]" value="NearestGene">Nearest gene<br>
        <input type = "checkbox" name = "check_list[]" value="LocationWithinGene">Location
within gene<br>
        <input type = "checkbox" name = "check_list[]" value="Allele1">Allele 1<br>
        <input type = "checkbox" name = "check_list[]" value="Allele2">Allele 2<br>
        <input type = "checkbox" name = "check_list[]" value="AfterQC">After QC

    <br>
    <br>

    <input type = "submit" name = "submit" value = "Print to screen">
    <input type = "submit" name = "submit" value = "Save to file (.csv)">

```

```

        <input type="reset" name="reset" value="Reset">

    </form>

</body>

<footer>
    <input type="button" onClick="parent.location='TitlePage.php'" value="Home" class="navigate">
    <input type="button" onClick="parent.location='DownloadData.php'" value="Download Data"
class="navigate">
    &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;<b>Useful links: </b><input type="button"
onClick="parent.location='https://www.ncbi.nlm.nih.gov/'" value="NCBI" class="link">
    <input type="button" onClick="parent.location='https://www.ensembl.org/index.html'"
value="Ensembl" class="link">
</footer>

</html>

```

MetabochipData_b.php

```

<html>

    <?php
    include("style2.html");
    include("sessioncontrol.php");
    include("config.php");
    ?>

    <style>
    table, th, td {
        border: 1px solid black;
        border-collapse: collapse;
        text-align: center;
        padding: 5px;
    }

```

```

}
</style>

<body>

    <?php

        $Filter=$_POST["Filter"];
        if ($Filter=="1") {
            $Filter_value="SNPID36";
        } elseif ($Filter=="2") {
            $Filter_value="SNPID37";
        } elseif ($Filter=="3") {
            $Filter_value="BasePairPosition36";
        } elseif ($Filter=="4") {
            $Filter_value="BasePairPosition37";
        } elseif ($Filter=="5") {
            $Filter_value="NearestGene";
        } elseif ($Filter=="6") {
            $Filter_value="Chromosome";
        } elseif ($Filter=="7") {
            $Filter_value="LocationWithinGene";
        }
        $SNPinfo=implode(",",$_POST["check_list"]);
        $Retrieve=$_POST["submit"];

        $myfile = fopen($_FILES["Filter2"]["tmp_name"], "rb");
        $FileType = pathinfo(basename($_FILES["Filter2"]["name"]),PATHINFO_EXTENSION);

        if($_POST["Filter2"]=="" AND file_exists($_FILES["Filter2"]["tmp_name"])) {

            if ($FileType == "txt") {

                if($Filter_value=="NearestGene") {

                    while(($content= fgets($myfile)) !==false){

```

```

        $content2=trim($content);
        $content3[]=$content2";
    }
    $content4=implode("|",$content3);

    fclose($myfile);
    $sql = "SELECT $SNPinfo FROM metabochip_snp_information WHERE $Filter_value
REGEXP'$content4'";

    } else {

        while(($content= fgets($myfile)) !==false){
            $content2=trim($content);
            $content3[]=$content2'";
        }
        $content4=implode(",",$content3);

        fclose($myfile);
        $sql = "SELECT $SNPinfo FROM metabochip_snp_information WHERE $Filter_value IN
($content4)";
    }
    } else {
        echo "Make sure the file you are trying to upload is a text file!";
    }
}

if($_POST["Filter2"]!=" AND !file_exists($_FILES["Filter2"]["tmp_name"])) {
    $Filter2=$_POST["Filter2"];
    if($Filter_value=="NearestGene") {
        $sql = "SELECT $SNPinfo FROM metabochip_snp_information WHERE $Filter_value LIKE
('%$Filter2%')";
    } else {
        $sql = "SELECT $SNPinfo FROM metabochip_snp_information WHERE $Filter_value IN
('$Filter2')";
    }
}

```

```

    }

    $result = $conn->query($sql);

    include("print_or_save.php");

    $row_cnt = $result->num_rows;

    if($_POST["Filter2"]==" AND !file_exists($_FILES["Filter2"]["tmp_name"])) {
        echo "Please specify either a single SNP-related filter value or upload a file of SNP-
related filter values.";

        } elseif($_POST["Filter2"]!=" AND file_exists($_FILES["Filter2"]["tmp_name"])) {
            echo "Please specify either a single SNP-related filter value or upload a file of SNP-
related filter values (not both).";

            } elseif ((($_POST["Filter2"]!=" OR file_exists($_FILES["Individuals"]["tmp_name"])) AND
!isset($SNPinfo)) {
                echo "Make sure you have selected some options of what to retrieve!";

            } elseif ($row_cnt>0 AND isset($SNPinfo)) {
                echo "<strong>$row_cnt result(s) matched the selected criteria</strong><br><br>";
                echo '</table>';

            } elseif ($row_cnt==0) {
                echo "<strong>0 result(s) matched the selected criteria</strong><br><br>";
            }

    $conn->close();
    ?>

</body>

</html>

```

Association Analysis Data Download Page

AssociationData_a.php

```
<html>

    <head>

        <?php
        include("style2.html");
        include("sessioncontrol.php");
        include("header_2.html");
        ?>

        <title>MetaboBTT Database/Download Data/Association Analysis Data</title>

        <style>
        form {
            width: 650px;
            margin: 0 auto;
        }
        </style>

    </head>

    <body>

        <h1>MetaboBTT Database</h1>
        <h2>Download Data</h2>
        <h3>Association Analysis Data</h3>

        <form action = "AssociationData_b.php" method="post" enctype="multipart/form-data">

            <b>Dataset:</b><select name="Dataset"><br>
```

```

        <option name = "All" value="1">All datasets<br>
        <option name = "Batch1_ALL" value="2">Yr13 female caregivers<br>
        <option name = "Batch2_ALL" value="3">Yr17/18 Bt20 participants<br>
        <option name = "Batch2_FEMALES" value="4">Female yr17/18 Bt20 participants<br>
        <option name = "Batch2_MALES" value="5">Male yr17/18 Bt20 participants<br>
        <option name = "Merged_ALL" value="6">Yr13 female caregivers and yr17/18 Bt20
participants merged<br>
        <option name = "Merged_FEMALES" value="7">Yr13 female caregivers and female yr17/18
Bt20 participants merged<br>
    </select>

    <br>
    <br>

    <b>Association analysis-related information to retrieve:</b><br><br>
        <input type = "checkbox" name = "check_list[]" value="*">ALL<br>
        <input type = "checkbox" name = "check_list[]" value="SNPID36">Build 36 SNP ID<br>
        <input type = "checkbox" name = "check_list[]" value="Dataset">Dataset<br>
        <input type = "checkbox" name = "check_list[]" value="Phenotype">Phenotype<br>
        <input type = "checkbox" name = "check_list[]"
value="P_valueUncorrected">Uncorrected P-value<br>
        <input type = "checkbox" name = "check_list[]"
value="Beta_ORUncorrected">Uncorrected Beta/OR<br>
        <input type = "checkbox" name = "check_list[]" value="P_valueCorrected">Corrected
P-value<br>
        <input type = "checkbox" name = "check_list[]" value="Beta_ORCorrected">Corrected
Beta/OR<br>
        <input type = "checkbox" name = "check_list[]" value="Covariate1">Covariate 1<br>
        <input type = "checkbox" name = "check_list[]" value="Covariate2">Covariate 2<br>
        <input type = "checkbox" name = "check_list[]" value="Covariate3">Covariate 3<br>

    <br>

    <b>Phenotype:</b><br><br>
        <input type = "checkbox" name = "check_list2[]" value="'DBP'">Diastolic blood
pressure<br>

```

```

pressure<br>
      <input type = "checkbox" name = "check_list2[]" value="'SBP'">Systolic blood
pressure<br>
      <input type = "checkbox" name = "check_list2[]" value="'HT'">High blood

<br>

<b>Filter by (select one or both):</b><br><br>

(1) SNP/gene: <select name = "Filter">
      <option name = "None" value="">No filter</option>
      <option name = "SNPID36" value="1">Build 36 SNP ID</option>
      <option name = "SNPID37" value="2">Build 37 SNP ID</option>
      <option name = "Gene" value="3">Gene</option>
</select>

name="Filter2">
<input type="text" name="Filter2" placeholder="Enter value"> OR <input type="file"

<br>
<br>

(2) P-value threshold:<select name = "P-value_name">
      <option name = "Uncorrected" value="1">Uncorrected</option>
      <option name = "Corrected" value="2">Corrected</option>
</select>

<

<select name = "P-value_number">
      <option name = "0" value="1">No threshold</option>
      <option name = "1x10-3" value="2">1x10-3</option>
      <option name = "1x10-4" value="3">1x10-4</option>
      <option name = "1x10-5" value="4">1x10-5</option>
      <option name = "1x10-6" value="5">1x10-6</option>
      <option name = "1x10-7" value="6">1x10-7</option>

```



```

        <option name = "1x10-8" value="7">1x10&#x207b&#x2078</option>
    </select>

    <br>
    <br>

    <input type = "submit" name = "submit" value = "Print to screen">
    <input type = "submit" name = "submit" value = "Save to file (.csv)">
    <input type="reset" name="reset" value="Reset">

    </form>

</body>

<footer>
    <input type="button" onClick="parent.location='TitlePage.php'" value="Home" class="navigate">
    <input type="button" onClick="parent.location='DownloadData.php'" value="Download Data"
class="navigate">
    &emsp;&emsp;&emsp;<b>Useful links: </b><input type="button"
onClick="parent.location='https://www.ncbi.nlm.nih.gov/'" value="NCBI" class="link">
    <input type="button" onClick="parent.location='https://www.ensembl.org/index.html'"
value="Ensembl" class="link">
</footer>

</html>

```

AssociationData_b.php

```

<html>

    <?php
    include("style2.html");
    include("sessioncontrol.php");
    include("config.php");

```

?>

```
<style>
table, th, td {
    border: 1px solid black;
    border-collapse: collapse;
    text-align: center;
    padding: 5px;
}
</style>
```

<body>

<?php

```
$Dataset=$_POST["Dataset"];
if ($Dataset=="1") {
    $Dataset_value="ALL";
} elseif ($Dataset=="2") {
    $Dataset_value="'BATCH1_ALL'";
    $Dataset_table="metabochip_snp_associations_batch1_all";
} elseif ($Dataset=="3") {
    $Dataset_value="'BATCH2_ALL'";
    $Dataset_table="metabochip_snp_associations_batch2_all";
} elseif ($Dataset=="4") {
    $Dataset_value="'BATCH2_FEMALES'";
    $Dataset_table="metabochip_snp_associations_batch2_females";
} elseif ($Dataset=="5") {
    $Dataset_value="'BATCH2_MALES'";
    $Dataset_table="metabochip_snp_associations_batch2_males";
} elseif ($Dataset=="6") {
    $Dataset_value="'MERGED_ALL'";
    $Dataset_table="metabochip_snp_associations_merged_all";
} elseif ($Dataset=="7") {
    $Dataset_value="'MERGED_FEMALES'";
    $Dataset_table="metabochip_snp_associations_merged_females";
}
```

```

    }
$Associnfo=implode(",",$_POST["check_list"]);
$Phenotype=implode(",",$_POST["check_list2"]);
$Filter=$_POST["Filter"];
    if ($Filter=="1") {
        $Filter_value="SNPID36";
    } elseif ($Filter=="2") {
        $Filter_value="SNPID37";
    } elseif ($Filter=="3") {
        $Filter_value="NearestGene";
    }
$PvalueName=$_POST["P-value_name"];
    if ($PvalueName=="1") {
        $PvalueName_value="P_valueUncorrected";
    } elseif ($PvalueName=="2") {
        $PvalueName_value="P_valueCorrected";
    }
$PvalueNumber=$_POST["P-value_number"];
    if ($PvalueNumber=="1") {
        $PvalueNumber_value="> '0'";
    } elseif ($PvalueNumber=="2") {
        $PvalueNumber_value="< '0.001'";
    } elseif ($PvalueNumber=="3") {
        $PvalueNumber_value="< '0.0001'";
    } elseif ($PvalueNumber=="4") {
        $PvalueNumber_value="< '0.00001'";
    } elseif ($PvalueNumber=="5") {
        $PvalueNumber_value="< '0.000001'";
    } elseif ($PvalueNumber=="6") {
        $PvalueNumber_value="< '0.0000001'";
    } elseif ($PvalueNumber=="7") {
        $PvalueNumber_value="< '0.00000001'";
    }
$Retrieve=$_POST["submit"];

```

```

if ($Dataset_value=="ALL") {

    $myfile = fopen($_FILES["Filter2"]["tmp_name"], "rb");
    $FileType = pathinfo(basename($_FILES["Filter2"]["name"]), PATHINFO_EXTENSION);

    if($Filter_value!=" " AND $_POST["Filter2"]==" " AND
file_exists($_FILES["Filter2"]["tmp_name"])) {

        if ($FileType == "txt") {

            if ($Filter_value=="SNPID36") {

                while(($content= fgets($myfile)) !==false){
                    $content2=trim($content);
                    $content3[]="'$content2'";
                }
                $content4=implode(",",$content3);

                fclose($myfile);
                $sql="SELECT $Associnfo FROM metabochip_snp_associations_batch1_all WHERE
$Filter_value IN ($content4) AND Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND $PvalueName_value
$PvalueNumber_value UNION SELECT $Associnfo FROM metabochip_snp_associations_batch2_all WHERE
$Filter_value IN ($content4) AND Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND $PvalueName_value
$PvalueNumber_value UNION SELECT $Associnfo FROM metabochip_snp_associations_batch2_females WHERE
$Filter_value IN ($content4) AND Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND $PvalueName_value
$PvalueNumber_value UNION SELECT $Associnfo FROM metabochip_snp_associations_batch2_males WHERE
$Filter_value IN ($content4) AND Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND $PvalueName_value
$PvalueNumber_value UNION SELECT $Associnfo FROM metabochip_snp_associations_merged_all WHERE
$Filter_value IN ($content4) AND Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND $PvalueName_value
$PvalueNumber_value UNION SELECT $Associnfo FROM metabochip_snp_associations_merged_females WHERE
$Filter_value IN ($content4) AND Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND $PvalueName_value
$PvalueNumber_value";

            }

            if ($Filter_value=="SNPID37") {

```

```

        while (($content= fgets($myfile)) !==false){
            $content2=trim($content);
            $content3[]="'$content2'";
        }
        $content4=implode(",",$content3);

        fclose($myfile);
        $sql="SELECT $Associnfo FROM metabochip_snp_associations_batch1_all WHERE
SNPID36 IN((SELECT SNPID36 FROM metabochip_snp_information WHERE $Filter_value IN ($content4))) AND
Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value UNION SELECT
$Associnfo FROM metabochip_snp_associations_batch2_all WHERE SNPID36 IN((SELECT SNPID36 FROM
metabochip_snp_information WHERE $Filter_value IN ($content4))) AND Phenotype IN($Phenotype) AND
$PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value UNION SELECT $Associnfo FROM
metabochip_snp_associations_batch2_females WHERE SNPID36 IN((SELECT SNPID36 FROM
metabochip_snp_information WHERE $Filter_value IN ($content4))) AND Phenotype IN($Phenotype) AND
$PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value UNION SELECT $Associnfo FROM
metabochip_snp_associations_batch2_males WHERE SNPID36 IN((SELECT SNPID36 FROM metabochip_snp_information
WHERE $Filter_value IN ($content4))) AND Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND
$PvalueName_value $PvalueNumber_value UNION SELECT $Associnfo FROM metabochip_snp_associations_merged_all
WHERE SNPID36 IN((SELECT SNPID36 FROM metabochip_snp_information WHERE $Filter_value IN ($content4))) AND
Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value UNION SELECT
$Associnfo FROM metabochip_snp_associations_merged_females WHERE SNPID36 IN((SELECT SNPID36 FROM
metabochip_snp_information WHERE $Filter_value IN ($content4))) AND Phenotype IN($Phenotype) AND
$PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value";
    }

    if ($Filter_value=="NearestGene") {

        while (($content= fgets($myfile)) !==false){
            $content2=trim($content);
            $content3[]=$content2;
        }
        $content4=implode("|",$content3);

        fclose($myfile);

```

```

        $sql="SELECT $Associnfo FROM metabochip_snp_associations_batch1_all WHERE
SNPID36 IN((SELECT SNPID36 FROM metabochip_snp_information WHERE $Filter_value REGEXP '$content4')) AND
Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value UNION SELECT
$Associnfo FROM metabochip_snp_associations_batch2_all WHERE SNPID36 IN((SELECT SNPID36 FROM
metabochip_snp_information WHERE $Filter_value REGEXP '$content4')) AND Phenotype IN($Phenotype) AND
$PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value UNION SELECT $Associnfo FROM
metabochip_snp_associations_batch2_females WHERE SNPID36 IN((SELECT SNPID36 FROM
metabochip_snp_information WHERE $Filter_value REGEXP '$content4')) AND Phenotype IN($Phenotype) AND
$PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value UNION SELECT $Associnfo FROM
metabochip_snp_associations_batch2_males WHERE SNPID36 IN((SELECT SNPID36 FROM metabochip_snp_information
WHERE $Filter_value REGEXP '$content4')) AND Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND
$PvalueName_value $PvalueNumber_value UNION SELECT $Associnfo FROM metabochip_snp_associations_merged_all
WHERE SNPID36 IN((SELECT SNPID36 FROM metabochip_snp_information WHERE $Filter_value REGEXP '$content4'))
AND Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value UNION
SELECT $Associnfo FROM metabochip_snp_associations_merged_females WHERE SNPID36 IN((SELECT SNPID36 FROM
metabochip_snp_information WHERE $Filter_value REGEXP '$content4')) AND Phenotype IN($Phenotype) AND
$PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value";

```

```

    }

```

```

    } else {

```

```

        echo "Make sure the file you are trying to upload is a text file!";

```

```

    }

```

```

}

```

```

    if($Filter_value!=" " AND $_POST["Filter2"]!=" " AND
!file_exists($_FILES["Filter2"]["tmp_name"])) {

```

```

        $Filter2=$_POST["Filter2"];

```

```

        if ($Filter_value=="SNPID36") {

```

```

            $sql="SELECT $Associnfo FROM metabochip_snp_associations_batch1_all WHERE
$Filter_value IN ('$Filter2') AND Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND
$PvalueName_value $PvalueNumber_value UNION SELECT $Associnfo FROM metabochip_snp_associations_batch2_all
WHERE $Filter_value IN ('$Filter2') AND Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND
$PvalueName_value $PvalueNumber_value UNION SELECT $Associnfo FROM

```

```

metabohip_snp_associations_batch2_females WHERE $Filter_value IN ('$Filter2') AND Phenotype
IN($Phenotype) AND $PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value UNION SELECT
$Associnfo FROM metabochip_snp_associations_batch2_males WHERE $Filter_value IN ('$Filter2') AND
Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value UNION SELECT
$Associnfo FROM metabochip_snp_associations_merged_all WHERE $Filter_value IN ('$Filter2') AND Phenotype
IN($Phenotype) AND $PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value UNION SELECT
$Associnfo FROM metabochip_snp_associations_merged_females WHERE $Filter_value IN ('$Filter2') AND
Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value";
    }

```

```

    if ($Filter_value=="SNPID37") {

```

```

        $sql="SELECT $Associnfo FROM metabochip_snp_associations_batch1_all WHERE
SNPID36 IN((SELECT SNPID36 FROM metabochip_snp_information WHERE $Filter_value IN ('$Filter2')) AND
Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value UNION SELECT
$Associnfo FROM metabochip_snp_associations_batch2_all WHERE SNPID36 IN((SELECT SNPID36 FROM
metabohip_snp_information WHERE $Filter_value IN ('$Filter2')) AND Phenotype IN($Phenotype) AND
$PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value UNION SELECT $Associnfo FROM
metabohip_snp_associations_batch2_females WHERE SNPID36 IN((SELECT SNPID36 FROM
metabohip_snp_information WHERE $Filter_value IN ('$Filter2')) AND Phenotype IN($Phenotype) AND
$PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value UNION SELECT $Associnfo FROM
metabohip_snp_associations_batch2_males WHERE SNPID36 IN((SELECT SNPID36 FROM metabochip_snp_information
WHERE $Filter_value IN ('$Filter2')) AND Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND
$PvalueName_value $PvalueNumber_value UNION SELECT $Associnfo FROM metabochip_snp_associations_merged_all
WHERE SNPID36 IN((SELECT SNPID36 FROM metabochip_snp_information WHERE $Filter_value IN ('$Filter2'))
AND Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value UNION
SELECT $Associnfo FROM metabochip_snp_associations_merged_females WHERE SNPID36 IN((SELECT SNPID36 FROM
metabohip_snp_information WHERE $Filter_value IN ('$Filter2')) AND Phenotype IN($Phenotype) AND
$PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value";
    }

```

```

    if ($Filter_value=="NearestGene") {

```

```

        $sql="SELECT $Associnfo FROM metabochip_snp_associations_batch1_all WHERE
SNPID36 IN((SELECT SNPID36 FROM metabochip_snp_information WHERE $Filter_value REGEXP '$Filter2')) AND
Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value UNION SELECT

```

```

$Associnfo FROM metabochip_snp_associations_batch2_all WHERE SNPID36 IN((SELECT SNPID36 FROM
metabochip_snp_information WHERE $Filter_value REGEXP '$Filter2')) AND Phenotype IN($Phenotype) AND
$PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value UNION SELECT $Associnfo FROM
metabochip_snp_associations_batch2_females WHERE SNPID36 IN((SELECT SNPID36 FROM
metabochip_snp_information WHERE $Filter_value REGEXP '$Filter2')) AND Phenotype IN($Phenotype) AND
$PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value UNION SELECT $Associnfo FROM
metabochip_snp_associations_batch2_males WHERE SNPID36 IN((SELECT SNPID36 FROM metabochip_snp_information
WHERE $Filter_value REGEXP '$Filter2')) AND Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND
$PvalueName_value $PvalueNumber_value UNION SELECT $Associnfo FROM metabochip_snp_associations_merged_all
WHERE SNPID36 IN((SELECT SNPID36 FROM metabochip_snp_information WHERE $Filter_value REGEXP '$Filter2'))
AND Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value UNION
SELECT $Associnfo FROM metabochip_snp_associations_merged_females WHERE SNPID36 IN((SELECT SNPID36 FROM
metabochip_snp_information WHERE $Filter_value REGEXP '$Filter2')) AND Phenotype IN($Phenotype) AND
$PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value";
    }

    } elseif ($Filter_value=="") {

        $sql="SELECT $Associnfo FROM metabochip_snp_associations_batch1_all WHERE Phenotype
IN($Phenotype) AND $PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value UNION SELECT
$Associnfo FROM metabochip_snp_associations_batch2_all WHERE Phenotype IN($Phenotype) AND
$PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value UNION SELECT $Associnfo FROM
metabochip_snp_associations_batch2_females WHERE Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND
$PvalueName_value $PvalueNumber_value UNION SELECT $Associnfo FROM
metabochip_snp_associations_batch2_males WHERE Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND
$PvalueName_value $PvalueNumber_value UNION SELECT $Associnfo FROM metabochip_snp_associations_merged_all
WHERE Phenotype IN($Phenotype) AND $PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value UNION
SELECT $Associnfo FROM metabochip_snp_associations_merged_females WHERE Phenotype IN($Phenotype) AND
$PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value";
    }

    } else {

        $myfile = fopen($_FILES["Filter2"]["tmp_name"], "rb");
        $FileType = pathinfo(basename($_FILES["Filter2"]["name"]),PATHINFO_EXTENSION);

```



```

        if($Filter_value!=" AND $_POST["Filter2"]==" AND
file_exists($_FILES["Filter2"]["tmp_name"])) {

            if ($FileType == "txt") {

                if ($Filter_value=="SNPID36") {

                    while(($content= fgets($myfile)) !==false){
                        $content2=trim($content);
                        $content3[]="'$content2'";
                    }
                    $content4=implode(",",$content3);

                    fclose($myfile);
                    $sql="SELECT $Associnfo FROM $Dataset_table WHERE $Filter_value IN
($content4) AND Phenotype IN($Phenotype) AND Dataset IN($Dataset_value) AND $PvalueName_value > 0 AND
$PvalueName_value $PvalueNumber_value";
                }

                if ($Filter_value=="SNPID37") {

                    while(($content= fgets($myfile)) !==false){
                        $content2=trim($content);
                        $content3[]="'$content2'";
                    }
                    $content4=implode(",",$content3);

                    fclose($myfile);
                    $sql="SELECT $Associnfo FROM $Dataset_table WHERE SNPID36 IN((SELECT
SNPID36 FROM metabochip_snp_information WHERE $Filter_value IN ($content4))) AND Phenotype IN($Phenotype)
AND Dataset IN($Dataset_value) AND $PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value";
                }

                if ($Filter_value=="NearestGene") {

                    while(($content= fgets($myfile)) !==false){

```

```

        $content2=trim($content);
        $content3[]="$content2";
    }
    $content4=implode("|",$content3);

    fclose($myfile);
    $sql="SELECT $Associnfo FROM $Dataset_table WHERE SNPID36 IN((SELECT
SNPID36 FROM metabochip_snp_information WHERE $Filter_value REGEXP '$content4')) AND Phenotype
IN($Phenotype) AND Dataset IN($Dataset_value) AND $PvalueName_value > 0 AND $PvalueName_value
$PvalueNumber_value";
    }

    } else {
        echo "Make sure the file you are trying to upload is a text file!";
    }
}

    if($Filter_value!=" AND $_POST["Filter2"]!=" AND
!file_exists($_FILES["Filter2"]["tmp_name"])) {

        $Filter2=$_POST["Filter2"];

        if ($Filter_value=="SNPID36") {

            $sql="SELECT $Associnfo FROM $Dataset_table WHERE $Filter_value IN
('$Filter2') AND Phenotype IN($Phenotype) AND Dataset IN($Dataset_value) AND $PvalueName_value > 0 AND
$PvalueName_value $PvalueNumber_value";
        }

        if ($Filter_value=="SNPID37") {

            $sql="SELECT $Associnfo FROM $Dataset_table WHERE SNPID36 IN((SELECT SNPID36
FROM metabochip_snp_information WHERE $Filter_value IN ('$Filter2')) AND Phenotype IN($Phenotype) AND
Dataset IN($Dataset_value) AND $PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value";
        }
    }
}

```

```

        if ($Filter_value=="NearestGene") {

            $sql="SELECT $Associnfo FROM $Dataset_table WHERE SNPID36 IN((SELECT SNPID36
FROM metabochip_snp_information WHERE $Filter_value IN ('$Filter2')) AND Phenotype IN($Phenotype) AND
Dataset IN($Dataset_value) AND $PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value";
        }

    } elseif ($Filter_value=="") {

        $sql="SELECT $Associnfo FROM $Dataset_table WHERE Phenotype IN($Phenotype) AND
Dataset IN($Dataset_value) AND $PvalueName_value > 0 AND $PvalueName_value $PvalueNumber_value";
    }

}

$result = $conn->query($sql);

include("print_or_save.php");

$row_cnt = $result->num_rows;

if($Filter_value!="" AND $_POST["Filter2"]=="" AND
!file_exists($_FILES["Filter2"]["tmp_name"])) {
    echo "Please specify either a single SNP-related filter value or upload a file of SNP-
related filter values.";
} elseif($Filter_value!="" AND $_POST["Filter2"]!="" AND
file_exists($_FILES["Filter2"]["tmp_name"])) {
    echo "Please specify either a single SNP-related filter value or upload a file of SNP-
related filter values (not both).";
} elseif(($PvalueNumber!="1" OR $Filter_value!="") AND ($_POST["Filter2"]!="" OR
file_exists($_FILES["Filter2"]["tmp_name"])) AND !isset($Associnfo) OR !isset($Phenotype)) {
    echo "Make sure you have selected some options of what to retrieve!";
} elseif ($row_cnt>0 AND isset($Associnfo) AND isset($Phenotype)) {
    echo "<strong>$row_cnt result(s) matched the selected criteria</strong><br><br>";
}

```

```
        echo '</table>';

    } elseif ($row_cnt==0) {
        echo "<strong>0 result(s) matched the selected criteria</strong><br><br>";
    }

    $conn->close();
?>

</body>

</html>
```