

HARVEST POTENTIAL

FINDINGS IN
**MATERNAL & CHILDREN'S
NUTRITION**
RESEARCH

A guide to how you can implement these
findings in your life!

EDN 2022 ESSENTIALS

10 Affordable & Indispensable
Ingredients You Must Have
In a Healthy Diet!

PREGNANCY NUTRITION

101

BY THE EDN INITIATIVE

JANUARY 2022

YOUR GUIDE TO
EVIDENCE-BASED
NUTRITION

**DELICIOUS &
NUTRITIOUS
RECIPES**

**WOMEN &
CHILDREN**



EDN INTRODUCING Harvest Potential



Dear reader,

Welcome to Harvest Potential!

The EDN initiative was established with the vision to combat poor nutrition and, therefore, promote healthy living. According to the World Health Organization (WHO), better nutrition is associated with a lower risk of non-transmissible diseases (such as diabetes and cardiovascular disease) and improved child and maternal health(1). A nutritious diet is also associated with longevity and a robust immune system(1). In addition, "healthy children learn better" and individuals "with adequate nutrition are more productive and can create opportunities to gradually break the cycles of poverty and hunger"(1).

A healthy diet is essential during all stages of life; however, prenatal nutrition is especially important as it not only impacts fetal development but influences long-term health in adulthood(2). In addition, evidence suggests that long-term consequences of poor nutrition during fetal development may not be limited to one generation "but may lead to poor health in the generations to follow, even if these individuals develop in normal conditions themselves," ultimately illustrating the importance of prenatal nutrition(3).

Although access to nutritious food is essential to a healthy diet, it is insufficient to ensure a balanced diet. Nutrition education is needed to promote making healthy food choices and the development of a healthy relationship with food. **As a result, this year marks the first year of Harvest Potential, an annual magazine aiming to provide evidence-based nutrition education and advice, by showcasing nutritional research findings, for women and children.**

Having the power to influence disease risk and education, nutrition can shape one's potential and allow for personal fulfillment. At the EDN initiative, we believe that food is opportunity, and opportunity is for everyone.

Sincerely,

The EDN Initiative Executive Team

Disclaimer: No content within this magazine should be used as a substitute for direct medical advice from a qualified clinician.

1. Nutrition [Internet]. [cited 2021 Dec 27]. Available from: <https://www.who.int/health-topics/nutrition>

2. Navarro E, Funtikova AN, Fito M, Schröder H. Prenatal nutrition and the risk of adult obesity: Long-term effects of nutrition on epigenetic mechanisms regulating gene expression. *The Journal of Nutritional Biochemistry*. 2017 Jan 1;39:1–14.

3. Roseboom TJ, Watson ED. The next generation of disease risk: Are the effects of prenatal nutrition transmitted across generations? Evidence from animal and human studies. *Placenta*. 2012 Nov 1;33(SUPPL. 2):e40–4.



PREGNANCY NUTRITION

All you need to know on this

101
New Journey!

Why is nutrition important during pregnancy?

From apparent physical changes to microscopic physiological changes, pregnancy can be demanding on the body. As a result, a nutritious diet is essential to help you during this exciting time of change. According to Canada's food guide, healthy eating can help you feel good, gain a healthy amount of weight, increase your energy, and provide you with the nutrients you and your baby need(1).

A common misconception is that, during pregnancy, you are "eating for two." This incorrect view can lead to overeating. During pregnancy, you only need approximately 300 more calories than your normal healthy calorie intake(2). If pregnant with twins or triplets, an additional 600 or 900 calories are required, respectively(2).

Which foods should I avoid?

According to Johns Hopkins Medicine, here are some foods you should avoid while pregnant(3):

- Unpasteurized milk and foods made with unpasteurized milk, such as soft cheeses.
- Hot dogs and luncheon meats (unless they are heated).
- Raw and undercooked seafood, eggs and meat.
- Refrigerated pâté and meat spreads.
- Refrigerated smoked seafood.



What are some essential nutrients I should know about?

The fundamental principles of nutrition are the same for pregnant and non-pregnant individuals; however, certain nutrients increase in importance due to playing significant roles in fetal development and pregnancy in general. Below is a guide to these essential nutrients(3)!

Vitamin C:

Vitamin C is essential for the formation of healthy gums, teeth, and bones(2). Vitamin C sources include citrus fruits, berries, broccoli, and tomatoes(2).



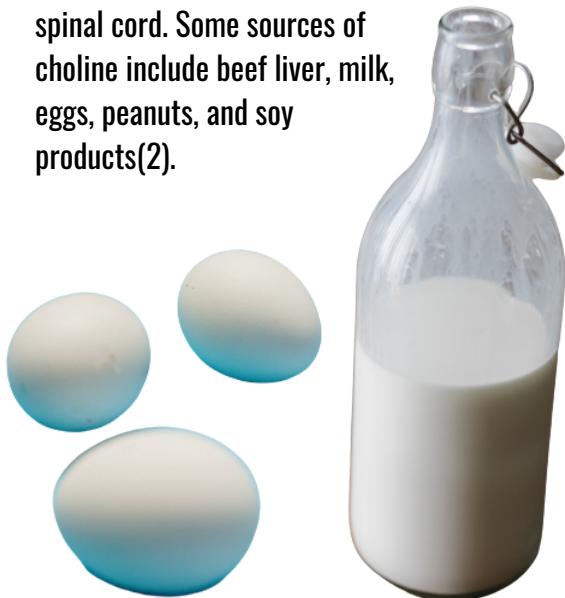
Vitamin B6:

Vitamin B6 not only helps form your fetus' red blood cells, but also aids in the body's utilization of proteins, carbs, and fats(2). Vitamin B6 can be found in liver, pork, beef, whole-grain cereals, and bananas(2).



Choline :

Choline consumption is vital for developing the fetus' brain and spinal cord. Some sources of choline include beef liver, milk, eggs, peanuts, and soy products(2).



Iron:

Iron helps red blood cells deliver oxygen to your fetus(2). Iron-rich foods include lean red meat, poultry, fish, prune juice, dried beans and peas, and iron-fortified cereals such as crisped rice cereals(2).



Folic Acid:

Folic acid helps prevent congenital disabilities of the brain and spine, and supports the development of the fetus and placenta(2). Some sources of folic acid include peanuts, dark leafy green vegetables, orange juice, beans, enriched bread and pasta, and fortified cereals(2).



Iodine:

Iodine is essential for the development of the brain(2). Foods with high iodine contents include fish, such as cod or tuna, dairy products, such as milk, yogurt, and cheese, and iodized salt(2).



Vitamin A:

The consumption of vitamin A helps form healthy skin and eyesight(2). Furthermore, vitamin A promotes bone growth(2). Vitamin A-rich foods include carrots, leafy green vegetables, and sweet potatoes(2).



Vitamin B12:

Vitamin B12 helps maintain the nervous system and helps form red blood cells, which are used to deliver oxygen to your fetus(2). Foods rich in vitamin B12 include meat, fish, poultry, and milk(2).



1. Healthy eating when pregnant and breastfeeding - Canada's Food Guide [Internet]. [cited 2021 Dec 28]. Available from: <https://food-guide.canada.ca/en/tips-for-healthy-eating/pregnant-breastfeeding/>
2. Nutrition During Pregnancy | ACOG [Internet]. [cited 2021 Dec 28]. Available from: <https://www.acog.org/womens-health/faqs/nutrition-during-pregnancy>
3. Nutrition During Pregnancy | Johns Hopkins Medicine [Internet]. [cited 2021 Dec 28]. Available from: <https://www.hopkinsmedicine.org/health/wellness-and-prevention/nutrition-during-pregnancy>

4 Findings in Children Nutrition Research

& How to Implement them in Your Life

1. Sugar Consumption in Infant, Children, and Adolescents

As claimed in a position paper of the European Society for Paediatric Gastroenterology, Hepatology and Nutrition Committee on Nutrition, sugar-containing beverages and free sugars increase the risk of obesity and dental problems(1). In addition, they are associated with an increased risk of type 2 diabetes and cardiovascular problems(1). “The term ‘free sugars,’ includes all [sugars] added to foods/beverages... plus sugars naturally present in honey/syrups/unsweetened fruit juices and fruit juice concentrates”(1).

Our Tips:

Instead of sweetened drinks, desserts, and fruit juices and smoothies, consume unsweetened milk, water, and intact fruits.

However, it is important to recognize that no foods should be labelled as “bad” or “good” to maintain a healthy relationship with food, in which disordered eating is absent(2). As a result, it is acceptable to allow free sugars in your child’s diet; nevertheless, ensure that daily consumption does not surpass the recommended intake below(3):

- Children (7 -10 years): maximum of 24g of free sugars a day (6 sugar cubes).
- Children (4-6 years): maximum of 19g of free sugars a day (5 sugar cubes).



1. Fuller Mis N, Braegger C, Bronsky J, Campoy C, Domellöf M, Embleton ND, et al. Sugar in Infants, Children and Adolescents: A Position Paper of the European Society for Paediatric Gastroenterology, Hepatology and Nutrition Committee on Nutrition. *Journal of pediatric gastroenterology and nutrition* [Internet]. 2017 Dec 1 [cited 2021 Dec 28];65(6):681–96. Available from: <https://pubmed.ncbi.nlm.nih.gov/28922262/>
2. Pereira RF, Alvarenga M. Disordered Eating: Identifying, Treating, Preventing, and Differentiating It From Eating Disorders. *Diabetes Spectrum* [Internet]. 2007 Jul 1 [cited 2021 Dec 28];20(3):141–8. Available from:
3. Sugar: the facts - NHS [Internet]. [cited 2021 Dec 28]. Available from: <https://www.nhs.uk/live-well/eat-well/how-does-sugar-in-our-diet-affect-our-health/>

Flip to see an applicable recipe



Recipe: Strawberry-Banana Yogurt Popsicle



Soothe your child's dessert cravings on a hot summer day with this healthy and delicious yogurt popsicle. Not only is this an excellent substitute for cold summer treats that are high in sugar, but it is also rich in calcium, vitamin C, and potassium.

Ingredients

- Sugar-free plain yogurt cups.
- Fresh/frozen strawberries.
- Fresh/frozen bananas.
- Popsicle sticks (a small spoon will also work!).

Steps

1. Dice half of a small banana and two strawberries.
2. Open the yogurt cup and remove some of the yogurt to make room for the fruit.
3. Add the fruits to the yogurt cup and mix to distribute the fruits throughout the yogurt.
4. Add the popsicle stick and place the cup into the freezer for a couple of hours until frozen.
5. Remove the popsicle from the yogurt cup and enjoy!



2. Child Nutrition and Academic Achievement

The connection between child nutrition and academic performance is explored in an article published by the Centers for Disease Control and Prevention(CDC)(1). It is illustrated that deficits in nutrients such as vitamins A, B12, B6, C, folate, iron, zinc, and calcium are associated with lower grades, difficulty concentrating, and lower productivity rates(1). Furthermore, children who skip breakfast often show decreased cognitive performance, impacting memory, problem-solving skills, alertness, and attentiveness(1).

Our Tip:

Ensure that your child always consumes breakfast. Avoid sugary cereals, chocolate, candy, and sugary fruit juices.

In addition, reference Canada's Food guide in order to learn about the essential food groups that should be included in your child's diet and the necessary daily intake(2).

Moreover, do not only focus on what your child is consuming. Make sure that you are not labelling foods as "bad" or "good" because negative attitudes towards certain foods can lead to eating disorders(3). Having a healthy diet is not just about ingredients; it is about one's relationship with food.



1. Centers for Disease Control. Health and Academic Achievement.
2. Canada's Food Guide [Internet]. [cited 2021 Dec 28]. Available from: <https://food-guide.canada.ca/en/>
3. Pereira RF, Alvarenga M. Disordered Eating: Identifying, Treating, Preventing, and Differentiating It From Eating Disorders. *Diabetes Spectrum* [Internet]. 2007 Jul 1 [cited 2021 Dec 28];20(3):141–8. Available from:

Flip to see an applicable recipe





Recipe: Mushroom and Spinach Omelette

Warm, steamy, soft, and most importantly, delicious! This mushroom and spinach omelette is loaded with nutritious ingredients essential for a healthy diet. With this breakfast, you can start your day off strong and ready for school.

Ingredients

- 1-2 eggs.
- $\frac{1}{4}$ cup of diced tomatoes.
- $\frac{1}{4}$ cup chopped bell pepper.
- $\frac{1}{4}$ cup of chopped mushrooms.
- $\frac{1}{2}$ cup of raw spinach.
- A teaspoon of butter.
- A pinch of black pepper.

Steps

1. Crack your eggs into a large bowl and add the vegetables.
2. Whisk the eggs and ingredients together.
3. Add a pinch of black pepper.
4. Set your pan on low-medium heat and place a teaspoon of butter.
5. Once the butter is melted, place the egg mixture into the pan.
6. Slowly lift the edges of the eggs and tilt the pan to allow the uncooked eggs to flow to the heated edge.
7. Repeat the last step until the omelette is cooked.
8. Slide the omelette onto a plate and enjoy!



3. Nutrition and Injury Prevention

Unfortunately, athletes often sustain multiple injuries while playing sports. Therefore, we should aim to prevent injury and help ensure that damage can be held to a minimum. As stated in an article published in 2019 regarding nutrition and its correlation to injury prevention, nutrition plays a vital role in injury prevention and the reduction of damage caused by an injury(1). Nutrients such as protein, vitamins C, D, and E, polyphenols (found in fruits and vegetables), and creatine all aid in the prevention and recovery from injury(1).

Our Tips:

Instead of giving your child sugary snacks and drinks after playing sports, consider giving them substitutes that are rich in nutrients, such as protein-rich meals/snacks, fruits, and water instead of pop/soda.



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1. Close GL, Baar K, Sale C, Bermon S. Nutrition for the Prevention and Treatment of Injuries in Track and Field Athletes. *International Journal of Sport Nutrition and Exercise Metabolism* [Internet]. 2019 Mar 1 [cited 2021 Dec 28];29(2):189–97. Available from: <https://journals.human kinetics.com/view/journals/ijsnem/29/2/article-p189.xml>

Flip to see an applicable recipe

Recipe: Grilled Chicken Nuggets



They are high in protein and low in fat and carbohydrates! Satisfy your child and (inner child) with this healthy meal. Whether it is to fill you up after a strenuous sports game or satisfy you during a family meal, it is a perfect addition to your diet.

Ingredients

- Boneless skinless chicken breast.
- Salt.
- Black pepper.
- Garlic powder.
- Paprika.
- Onion powder.
- Desired dipping sauce! (Try to avoid condiments such as ketchup, which is high in sugar, or cream-based sauces, which are high in fat. Consider a healthier alternative such as sugar-free ketchup, mustard, or hot sauce).

Steps

- 1.Cut the chicken into cubes, mimicking the shape of classic chicken nuggets.
- 2.Add the desired amount of seasoning to your nuggets.
- 3.Cook the nuggets on a grill or pan.
- 4.Once cooked, place them on a plate next to your desired dipping sauce and enjoy!



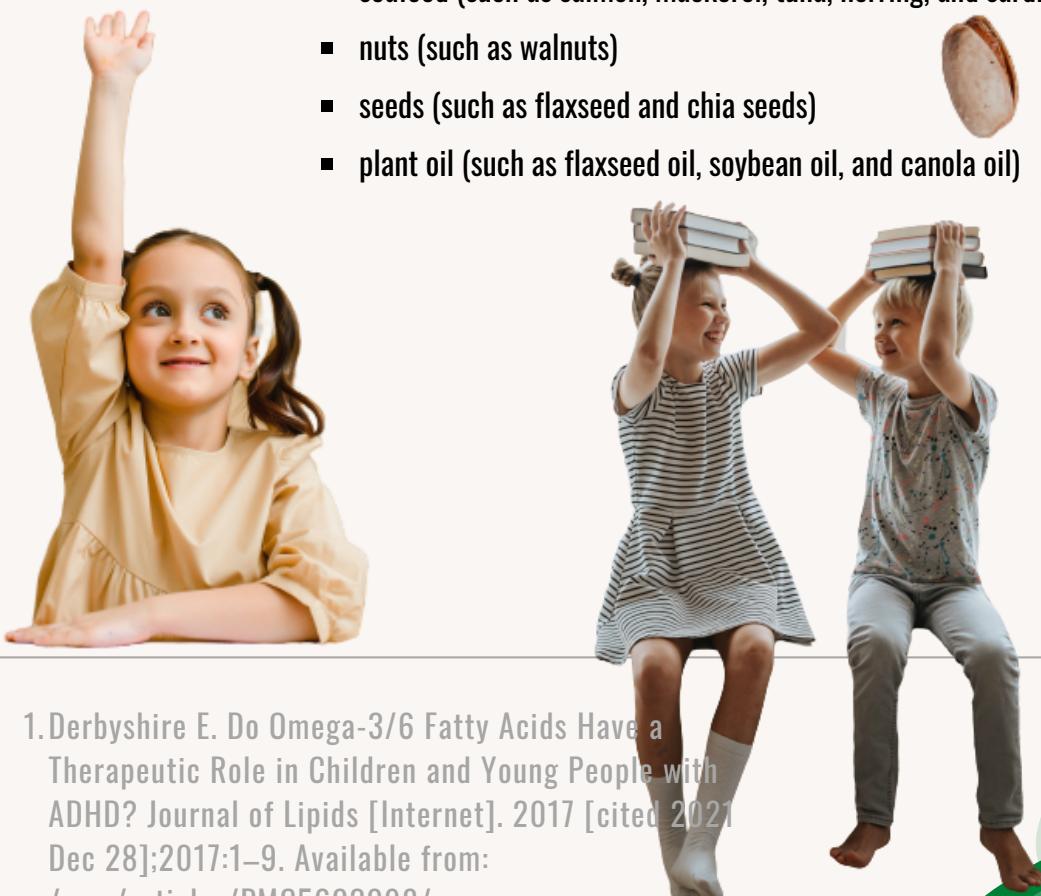
4. Nutrition and Attention Deficit Hyperactivity Disorder (ADHD)

Attention deficit hyperactivity disorder(ADHD) is a common neurodevelopmental disorder occurring in children, adolescents, and adults, with an estimated prevalence of 5 to 7%(1). An article published in 2017 exploring the connection between omega-3 and omega-6 fatty acids supplements and ADHD illustrates the positive impact of omega-3 fatty acids on ADHD management. Those who consumed omega-3 fatty acid supplements did not need to use high-dose ADHD medication to manage their symptoms(1). Moreover, reading ability improved in children who consumed omega-3/6 fatty acid supplements(1).

Our Tips:

Include omega-3 fatty acid-rich foods into your diet. Some sources of omega-3 include(2):

- seafood (such as salmon, mackerel, tuna, herring, and sardines)
- nuts (such as walnuts)
- seeds (such as flaxseed and chia seeds)
- plant oil (such as flaxseed oil, soybean oil, and canola oil)



- 1.Derbyshire E. Do Omega-3/6 Fatty Acids Have a Therapeutic Role in Children and Young People with ADHD? *Journal of Lipids* [Internet]. 2017 [cited 2021 Dec 28];2017:1–9. Available from: [/pmc/articles/PMC5603098/](https://pmc/articles/PMC5603098/)
- 2.Omega-3 Fatty Acids - Consumer [Internet]. [cited 2021 Dec 28]. Available from: <https://ods.od.nih.gov/factsheets/Omega3FattyAcids-Consumer/>

Flip to see an applicable recipe





Recipe: Tuna Salad

Creamy, savoury, and delicious! This tuna salad recipe is perfect for any day, fulfilling your body's need for omega-3 and other essential nutrients.

Ingredients

- A can of tuna.
- 2 tablespoons of minced celery and red onion.
- 1 teaspoon of minced parsley.
- $\frac{1}{4}$ - $\frac{1}{3}$ cup of mayonnaise.
- 1 tablespoon of mustard.
- Black pepper.
- Lemon juice (bottled or freshly squeezed).

Steps

1. Place all of the ingredients in a bowl and mix.
2. Add black pepper and lemon juice as needed.
3. And just like that, you're done!



4 Findings in Maternal & Infant Nutrition Research

& How to
Implement
them in
Your *Life*

1. Maternal Obesity

An article, published in 2018, investigating nutrition and pregnancy outcomes illustrated the negative consequences of maternal nutrient excess on offspring(1). Maternal obesity is associated with offspring obesity, hypertension, insulin resistance, and cardiovascular disease(1).

Our Tips:

If you are trying to get pregnant and are overweight, consider contacting your physician regarding losing weight in a healthy way that does not deprive your body of essential nutrients.

If you are already pregnant and overweight, do not make dietary changes without consulting your physician. As previously established, prenatal nutrition is paramount for the health of your child. Therefore, any changes that deprive your baby of essential nutrients or cause nutrient excess may impact your health and that of your child.



Flip to see an
applicable recipe

1. Bellissimo CJ, Vickers MH, Sloboda DM. Nutrition and Pregnancy Outcomes. Encyclopedia of Reproduction. 2018 Jan 1:569–81.

Recipe

Chickpea Quinoa Salad

This tasty salad is a perfect addition to your diet! The high-fibre quinoa and protein-rich chickpeas will leave you feeling full and satisfied, aiding in weight management. At the same time, the crunchy vegetables will provide you with the minerals and vitamins your body needs to thrive.

Ingredients

- 1 can of chickpeas.
- 1 cup of uncooked quinoa.
- 1 large diced cucumber.
- 1 large diced bell pepper.
- 1 small diced red onion.
- 1 cup of chopped cilantro.
- 2-3 Lemons.
- Desired amount of black pepper.
- $\frac{1}{4}$ cup of oil of choice.
- Desired amount of salt.
- 2 minced garlic cloves.

Steps

1. To cook the quinoa, add it to a pot containing $1\frac{1}{2}$ cup of water. Bring the mixture to a boil, then decrease the temperature to let it simmer. The quinoa is cooked once all the water has been absorbed.
2. Combine the cooked and cooled quinoa, chickpeas, and vegetables in a large bowl.
3. Squeeze the lemons and add the juice to a small bowl. Add minced garlic, oil, and salt and pepper to the small bowl.
4. Add the dressing to the large salad bowl and mix to distribute it.
5. Enjoy!



2. Prenatal and Infant Nutrient Deficiency

In the *Journal of Gastroenterology and Hepatology*, an article exploring fetal and infant exposure to famine revealed the correlation between famine exposure, during pregnancy and infancy, and disease risk(1). The study examined the prevalence of fatty liver, obesity, and hyperglycemia (i.e., high blood sugar) in 10,935 adults born in China, some of whom were exposed to the Great Chinese Famine (1959–1961) during early life(1).

The prevalence of fatty liver, obesity, and hyperglycemia was greater in adults exposed to famine during early life(1).

Our Tips:

Although maternal obesity may increase offspring's disease risk, nutrient deficiency due to inadequate food consumption can also be detrimental. As a result, it is vital to ensure that you receive all the necessary nutrients during pregnancy. Reference our "Pregnancy 101" segment for information on essential nutrients and how to incorporate them into your diet.

In addition, ensure that your child is consuming a healthy diet. Excellent sources of information regarding infant nutrition are [Infant nutrition - Canada.ca](#) and [Canada's Food Guide](#)(2,3).



1. Chen JP, Peng B, Tang L, Sun R, Hu S, Wen XY, et al. Fetal and infant exposure to the Chinese famine increases the risk of fatty liver disease in Chongqing, China. *Journal of Gastroenterology and Hepatology* [Internet]. 2016 Jan 1 [cited 2021 Dec 29];31(1):200–5. Available from: <https://europepmc.org/article/MED/26201820>
2. Infant nutrition - Canada.ca [Internet]. [cited 2021 Dec 29]. Available from: <https://www.canada.ca/en/health-canada/services/infant-care/infant-nutrition.html#a2>
3. Canada's Food Guide [Internet]. [cited 2021 Dec 29]. Available from: <https://food-guide.canada.ca/en/>

Flip to see an applicable recipe

Recipe

11 Month-old Infant Midday Meal

Starting solid foods is an exciting time for you and your baby! However, it may be difficult for new mothers to navigate through this time and find nutritious and enjoyable foods for their babies. This recipe is an excellent source of protein and vitamins to nourish your baby.

Ingredients

- Mashed salmon (can be homemade or store-bought).
- Sweet potato.
- Broccoli.

Steps

1. Boil broccoli and mash it.
2. Bake sweet potato and cut it into small pieces.
3. Empty tube of mashed salmon onto a plate and serve with the broccoli and sweet potato.



3. Maternal Postpartum Diet and Postpartum Depression

A promising article published in 2020 summarizing the findings of a systematic review showcases the correlation between healthy postpartum diets with fewer postpartum depression symptoms(1).

Specifically, diets emphasizing the consumption of the following ingredients are associated with this positive correlation(1):

- Fruits
- Vegetables
- Fish
- Grains
- Legumes
- Herbs

As a new mother, you are faced with countless challenges as you navigate this new world. As a result, you may find it challenging to plan your meals. Many mothers have poor nutrition during the postpartum period(1). However, you must realize that caring for yourself and loving yourself is another way of loving and caring for your baby.

Our Tip:

Make sure to plan your meals, and using a journal or food tracking app, track the type and amount of foods you are eating. That way, you are conscious of what your diet entails and therefore can change it (if it needs changing) to a healthy diet.

1. Opie RS, Uldrich AC, Ball K. Maternal Postpartum Diet and Postpartum Depression: A Systematic Review. *Maternal and Child Health Journal* [Internet]. 2020 Aug 1 [cited 2021 Dec 29];24(8):966–78. Available from: <https://link.springer.com/article/10.1007/s10995-020-02949-9>

Flip to see an applicable recipe



Recipe

Salmon Steak

You are extremely busy caring for your new baby as a new mother! Therefore, you will definitely enjoy this fast, nutritious, and delicious salmon recipe.

Ingredients

- Salmon steak.
- Your choice of oil.
- A lemon.
- 3 teaspoons of chopped fresh parsley.
- 3 teaspoons of chopped fresh thyme.
- 2 minced garlic cloves.
- Black pepper.
- Salt.

Steps

1. Place 4 tablespoons of oil on a small plate.
2. Add the garlic, parsley, and thyme to the plate.
3. Add the marinade to the salmon and place it in the fridge for a minimum of 30 minutes.
4. Place a pan on the stove. Once the pan is hot, place the salmon steak and cook for 5 minutes on each side.
5. Season to taste with salt and pepper and squeeze lemon juice.
6. Enjoy!



4. Iron Deficiency in Women and Pregnancy

According to an article published in 2017 regarding women and iron deficiency(ID), ID is the most common micronutrient deficiency globally and is especially prevalent in the female population(1). This is due to heavy menstruation, which results in low blood iron levels(1). Furthermore, ID is prevalent during pregnancy because the volume of blood increases and iron is needed to produce red blood cells(2).

Our Tips:

Avoid dairy products, tea, and coffee as they can hinder iron absorption(3). In addition, make sure to incorporate iron-rich foods into your diet. Sources of iron include(4):

- Lean red meat.
- Poultry.
- Fish.
- Prune juice.
- Dark leafy greens.

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1. Percy L, Mansour D, Fraser I. Iron deficiency and iron deficiency anaemia in women. Best practice & research Clinical obstetrics & gynaecology [Internet]. 2017 Apr 1 [cited 2021 Dec 29];40:55–67. Available from: <https://pubmed.ncbi.nlm.nih.gov/28029503/>
 2. Anemia in Pregnancy - Health Encyclopedia - University of Rochester Medical Center [Internet]. [cited 2021 Dec 29]. Available from: <https://www.urmc.rochester.edu/encyclopedia/content.aspx?ContentTypeID=90&ContentID=P02428>
 3. Zijp IM, Korver O, Tijburg LBM. Effect of Tea and Other Dietary Factors on Iron Absorption. <http://dx.doi.org/101080/10408690091189194> [Internet]. 2010 [cited 2021 Dec 29];40(5):371–98. Available from: <https://www.tandfonline.com/doi/abs/10.1080/10408690091189194>
 4. Nutrition During Pregnancy | Johns Hopkins Medicine [Internet]. [cited 2021 Dec 28]. Available from: <https://www.hopkinsmedicine.org/health/wellness-and-prevention/nutrition-during-pregnancy>



Flip to see an applicable recipe



Recipe

Oatmeal



When you think of iron, you think of lean meat, fish, and dark leafy greens, but what if I told you there is another source of iron that is not only low in cholesterol, unlike lean meat and poultry, but is also dairy-free. Yep, you guessed it, oats! Let's make oatmeal.

Ingredients

- Whole oats.
- Water.
- Desired toppings:
 - For a savoury dish, add vegetables. For a sweet dish, add nuts and fruits (avoid adding sweeteners)

Steps

1. Cook the oats either on a stovetop or in the microwave. The ratio of oats to water should always be 1:2.
 - a. When microwaving oats, start with 2 minutes in the microwave. If still uncooked, microwave for additional time.
 - b. When cooking on the stove, bring the water to a boil, then put the heat on low and add the oats. Keep stirring until the oats thicken and absorb the water.
2. Your oatmeal base is now complete. Add toppings of your choice and enjoy!



EDN 2022

Essentials

10 AFFORDABLE & INDISPENSABLE
INGREDIENTS YOU MUST HAVE
IN A HEALTHY DIET!

1. Quinoa (99 cents/ 100g)

This nutritious whole grain is an excellent source of protein and fibre, leaving you feeling full after consumption(1). Quinoa contains the nine essential amino acids(1). Quinoa can be served as a breakfast cereal, a substitute for rice, and can be added to salads(1)

MANGANESE
PHOSPHORUS
MAGNESIUM
FOLATE
THIAMIN (VITAMIN B1)

2. Chickpeas (22 cents/ 100ml)

Chickpeas are not only an excellent source of nutrients, but they may also help decrease the risk of developing the following diseases(2):

- **Heart Disease:** Chickpeas contain sitosterol, which interferes with cholesterol absorption, therefore lowering blood cholesterol levels and ultimately the risk of heart disease.
- **Obesity:** Chickpeas are high in fibre; therefore, they delay digestion and ultimately cause the feeling of fullness. Such feelings of fullness can aid with weight management.

PROTEIN
FOLATE
FIBER
IRON
PHOSPHORUS

Chickpeas can be served as hummus, added to salads and soups, and roasted to make a delicious and crunchy snack(2).

3. Tofu (\$2/ 454g)

Tofu, and other soybean derivatives, have been associated with a lower risk of heart disease and hormone-dependant diseases(3). In addition, it has been established that there is a negative correlation between soybean consumption and the prevalence of ovarian cancer(3).

POTASSIUM
MAGNESIUM
CALCIUM
ZINC
IRON

4. Minimally Processed Oats (\$2/ 1Kg)

Whole grains, such as oats, help prevent blood sugar and insulin level spikes(4). This is because minimally processed oats have a low glycemic index (4). Note that processed oats have a high glycemic index and should be avoided. In addition, oats are rich in fibre, therefore promoting bowel regularity and ultimately digestive health(4).

Oats can be served as oatmeal and ground to make oat flour(4).

MANGANESE
PHOSPHORUS
MAGNESIUM
FOLATE
THIAMIN (VITAMIN B1)

5. Broccoli (\$2.67/ 500g)

Broccoli consumption has been associated with good heart health, as eating broccoli has been correlated with less calcium built up in the arteries(6). Individuals with calcified arteries are more likely to suffer a heart attack or stroke(6).

Broccoli can be steamed or grilled and served with a meal, diced to make broccoli rice, and incorporated in salads.

PROTEIN
FOLATE
FIBRE
IRON
PHOSPHORUS(5)

6. Banana (59 cents/lb)

Bananas help maintain robust cardiovascular health and help ease the digestive process, especially in those with constipation(7). Furthermore, bananas are linked to weight loss and are a perfect fruit for those with a sweet tooth(7).

Banana can be served as a topping, incorporated in baked goods, or a snack(7).

VITAMIN B6
POTASSIUM
FIBRE
MAGNESIUM
VITAMIN C

7. Eggs (26 cents/ Egg)

Eggs are an excellent source of protein and contain nutrients and minerals vital for the brain and nervous system(8). In addition, the consumption of eggs is important for pregnant women, as eggs contain choline which is vital for the development of the fetus' brain and spinal cord (Reference our essential nutrients section in the pregnancy 101 segment for more information about choline).

Eggs can be served scrambled, as an omelette, sunny-side-up, or incorporated into baked goods.

PROTEIN
CHOLINE
BIOTIN (VITAMIN B7)
VITAMIN A
ANTIOXIDANTS



8. Frozen Blueberries (63 cents/ 100g)

Blueberries can reduce the risk of cardiovascular disease, death, type 2 diabetes, and improve weight maintenance and neuroprotection(10). Blueberries are also low in calories and sugar, making blueberries the perfect superfood snack(10)!

Blueberries can be served as a topping, snack, or incorporated into desserts.

9. Red Cabbage (\$3.24/ 1kg)

Red cabbage contains anthocyanins, which are directly linked to a lower risk of cardiovascular disease(11). Furthermore, intake of red cabbage is associated with a reduced risk of multiple types of cancers(12).

Red cabbage can be served as a snack, with hummus, in a salad, or in stir fry.

ANTIOXIDANTS

IRON

ZINK

VITAMIN A

VITAMIN C(9)

VITAMIN C

VITAMIN A

FIBRE

POTASSIUM

ANTHOCYANINS

10. Sweet Potato (\$3.24/ 1kg)

Sweet potatoes are loaded with beneficial vitamins and minerals(13). Sweet potatoes also contain beta-carotene, which plays a potential role "in human health and disease prevention"(13).

Sweet potatoes can be served as chips, fries, as well as baked.

VITAMIN B6

POTASSIUM

FIBRE

BETA-CAROTENE

VITAMIN C



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