

Slide 1:

cEP SD

“AKA AUTISM SPECTRUM DISORDER

Tey ay see ST

‘4 peti Seles

-SYMPTOMS INVOLVE: © 3. ey

“IMPAIRMENTS: IN SOCIAL: COMMUNICATION AND INTERACTION
RESTRICTED AND REPETITIVE BEHAVIORS ~ “-) ’

te tl. 4

Lo a

Slide 2:

cEP SD

“AKA AUTISM SPECTRUM DISORDER

Tey ay see ST

‘4 peti Seles

-SYMPTOMS INVOLVE: © 3. ey

“IMPAIRMENTS: IN SOCIAL: COMMUNICATION AND INTERACTION
RESTRICTED AND REPETITIVE BEHAVIORS ~ “-) ’

te tl. 4

Lo a

Slide 3:

cEP SD

“AKA AUTISM SPECTRUM DISORDER

Tey ay see ST

‘4 patie Sef ee es

~SYMPTOMS INVOLVE: * 3&4

“IMPAIRMENTS. IN SOCIAL: COMMUNICATION AND INTERACTION
RESTRICTED AND REPETITIVE BEHAVIORS ~ “-) ’

te tl. 4

Lo a

Slide 4:

cEP SD

“AKA AUTISM SPECTRUM DISORDER

Tey ay see ST

'4 patie Sef ee es

~SYMPTOMS INVOLVE: * 3&4

"IMPAIRMENTS. IN SOCIAL: COMMUNICATION AND INTERACTION
RESTRICTED AND REPETITIVE BEHAVIORS ~ "-" '

te tl. 4

Lo a

Slide 5:

cEP SD

"AKA AUTISM SPECTRUM DISORDER

Tey ay see ST

'4 patie Sef ee es

~SYMPTOMS INVOLVE: * 3&4

"IMPAIRMENTS. IN SOCIAL: COMMUNICATION AND INTERACTION
RESTRICTED AND REPETITIVE BEHAVIORS ~ "-" '

te tl. 4

Lo a

Slide 6:

cEP SD

"AKA AUTISM SPECTRUM DISORDER

Tey ay see ST

'4 patie Sef ee es

~SYMPTOMS INVOLVE: * 3&4

"IMPAIRMENTS. IN SOCIAL: COMMUNICATION AND INTERACTION
RESTRICTED AND REPETITIVE BEHAVIORS ~ "-" '

te tl. 4

Lo a

Slide 7:

TYPICAL BRAIN AUTISTIC BRAIN

iy iy

Slide 8:

TYPICAL BRAIN AUTISTIC BRAIN

GTI TES

1 :

Slide 9:

TYPICAL BRAIN AUTISTIC BRAIN

v

Slide 10:

TYPICAL BRAIN AUTISTIC BRAIN

we eo

UNUSUALLY RAPID. GROWTH

IN INFANCY AND EARLY CHILDHOOD

ATYPICAL PATTERNS OF CONNECTIVITY:

Slide 11:

TYPICAL BRAIN AUTISTIC BRAIN

Cao /

(pA Pe

UNUSUALLY RAPID: GROWTH

IN INFANCY AND EARLY CHICDHOOD

ATYPICAL PATTERNS OF CONNECTIVITY:

Slide 12:

TYPICAL BRAIN AUTISTIC BRAIN

Rea,

Spe eaae* Ne,

UNUSUALLY RAPID GROWTH

IN INFANCY AND EARLY CHILDHOOD

~ATYPICAL PATTERNS OF CONNECTIVITY

Slide 13:

TYPICAL BRAIN AUTISTIC BRAIN

LEE (ALO

OY Eilezii <S © cae ar

UNUSUALLY RAPID. GROWTH

IN INFANCY AND EARLY CHILDHOOD

~ATYPICAL PATTERNS OF CONNECTIVITY

Slide 14:

TYPICAL BRAIN AUTISTIC BRAIN

ce ;

FEA A eS eae

Sead we

UNUSUALLY RAPID. GROWTH

IN INFANCY AND EARLY CHILDHOOD.

‘ATYPICAL PATTERNS OF CONNECTIVITY:

Slide 15:

TYPICAL BRAIN AUTISTIC BRAIN

eee -

f BA fe See er ERS

Al we

UNUSUALLY RAPID. GROWTH

IN INFANCY AND EARLY CHILDHOOD.

ATYPICAL PATTERNS OF CONNECTIVITY:

Slide 16:

TYPICAL BRAIN AUTISTIC BRAIN

si ‘=

DS mS = LION

EERE ee ee

Seren RSA Se

Sd ad

UNUSUALLY RAPID. GROWTH

IN INFANCY AND EARLY CHILDHOOD.

ATYPICAL PATTERNS OF CONNECTIVITY:

Slide 17:

TYPICAL BRAIN AUTISTIC BRAIN

si ‘=

DS mS = LION

EERE ee ee

Seren RSA Se

Sd ad

UNUSUALLY RAPID. GROWTH

IN INFANCY AND EARLY CHILDHOOD.

ATYPICAL PATTERNS OF CONNECTIVITY:

Slide 18:

TYPICAL BRAIN AUTISTIC BRAIN

ter eee SRS

“UNUSUALLY RAPID GROWTH

IN INFANCY AND EARLY CHILDHOOD.

“ATYPICAL PATTERNS OF CONNECTIVITY.

Slide 19:

TYPICAL BRAIN AUTISTIC BRAIN

ter eee SRS

“UNUSUALLY RAPID GROWTH

IN INFANCY AND EARLY CHILDHOOD.

“ATYPICAL PATTERNS OF CONNECTIVITY.

Slide 20:

TYPICAL BRAIN AUTISTIC BRAIN

ter eee SRS

“UNUSUALLY RAPID GROWTH

IN INFANCY AND EARLY CHILDHOOD.

“ATYPICAL PATTERNS OF CONNECTIVITY.

Slide 21:

TYPICAL BRAIN AUTISTIC BRAIN

ter eee SRS

“UNUSUALLY RAPID GROWTH

IN INFANCY AND EARLY CHILDHOOD.

“ATYPICAL PATTERNS OF CONNECTIVITY.

Slide 22:

TYPICAL BRAIN AUTISTIC BRAIN

ter eee SRS

“UNUSUALLY RAPID GROWTH
IN INFANCY AND EARLY CHILDHOOD.

“ATYPICAL PATTERNS OF CONNECTIVITY.

Slide 23:

TYPICAL BRAIN AUTISTIC BRAIN

ter eee SRS

“UNUSUALLY RAPID GROWTH
IN INFANCY AND EARLY CHILDHOOD.

“ATYPICAL PATTERNS OF CONNECTIVITY.

Slide 24:

TYPICAL BRAIN AUTISTIC BRAIN

ter eee SRS

“UNUSUALLY RAPID GROWTH
IN INFANCY AND EARLY CHILDHOOD.

“ATYPICAL PATTERNS OF CONNECTIVITY.

Slide 25:

TYPICAL BRAIN AUTISTIC BRAIN

Or ae g| SOS aN

Sad we

UNUSUALLY RAPID GROWTH
1N INFANCY AND EARLY CHILDHOOD:
ATYPICAL PATTERNS OF CONNECTIVITY:

Slide 26:

TYPICAL BRAIN AUTISTIC BRAIN

OT Org SOS aN

Sad we

UNUSUALLY RAPID GROWTH

1N INFANCY AND EARLY CHILDHOOD:
ATYPICAL PATTERNS OF CONNECTIVITY:

Slide 27:

TYPICAL BRAIN AUTISTIC BRAIN

OT Org SOS aN

Sad we

UNUSUALLY RAPID GROWTH

1N INFANCY AND EARLY CHILDHOOD:

ATYPICAL PATTERNS OF CONNECTIVITY:

Slide 28:

TYPICAL BRAIN AUTISTIC BRAIN

OT Org SOS aN

Sad we

UNUSUALLY RAPID GROWTH

1N INFANCY AND EARLY CHILDHOOD:

ATYPICAL PATTERNS OF CONNECTIVITY:

Slide 29:

TYPICAL BRAIN AUTISTIC BRAIN

OT Org SOS aN

Sad we

UNUSUALLY RAPID GROWTH

1N INFANCY AND EARLY CHILDHOOD:

ATYPICAL PATTERNS OF CONNECTIVITY:

Slide 30:

RISK FACTORS & MECHANISMS

P-: VCa

“RISK IS STRONGLY-INFLUENCED BY: GENETICS, BUT
ENVIRONMENT, ALSO LIKELY PLAYS A LARGE ROLE

ces ee

er

Ce ee ae }

eer hg

BAS zee

ofo, ay,

Slide 31:

RISK FACTORS & MECHANISMS

P-: VCa

“RISK IS STRONGLY-INFLUENCED BY:GENETICS, BUT
ENVIRONMENT,ALSO LIKELY PLAYS A LARGE ROLE

ces ee

er

Ce ee ae }

eer hg

BAS zee

ofo, ay,

Slide 32:

RISK FACTORS & MECHANISMS

P-: VCa

“RISK IS STRONGLY-INFLUENCED BY:GENETICS, BUT
ENVIRONMENT,ALSO LIKELY PLAYS A LARGE ROLE

ces ee

er

Ce ee ae }

eer hg

BAS zee

ofo, ay,

Slide 33:

RISK FACTORS & MECHANISMS

P-: VCa

“RISK IS STRONGLY-INFLUENCED BY:GENETICS, BUT
ENVIRONMENT,ALSO LIKELY PLAYS A LARGE ROLE

ces ee

er

Ce ee ae }

eer hg

BAS zee

ofr, ay,

Slide 34:

RISK FACTORS & MECHANISMS

P-: VCa

“RISK IS STRONGLY-INFLUENCED BY:GENETICS, BUT
ENVIRONMENT,ALSO LIKELY PLAYS A LARGE ROLE

ces ee

er

Ce ee ae }

eer hg

BAS zee

ofr, ay,

Slide 35:

RISK FACTORS & MECHANISMS

P-: VCa

“RISK IS STRONGLY-INFLUENCED BY:GENETICS, BUT
ENVIRONMENT,ALSO LIKELY PLAYS A LARGE ROLE

ces ee

er

Ce ee ae }

eer hg

BAS zee

ofr, ay,

Slide 36:

RISK FACTORS & MECHANISMS

“RISK IS STRONGLY*INFLUENCED BY:GENETICS, BUT
ENVIRONMENT,ALSO LIKELY PLAYS A KARGE ROLE

whet LE, ae - A

ce Gedy ese 2

eeeatisy he

2 3 Le nate

cfr 4

Slide 37:

RISK FACTORS & MECHANISMS

“RISK IS STRONGLY*INFLUENCED BY:GENETICS, BUT
ENVIRONMENT,ALSO LIKELY PLAYS A KARGE ROLE

whet LE, ae - A

ce Gedy ese 2

eeeatisy he

2 3 Le nate

cfr 4

Slide 38:

RISK FACTORS & MECHANISMS

“RISK IS STRONGLY*INFLUENCED BY:GENETICS, BUT
ENVIRONMENT,ALSO LIKELY PLAYS A KARGE ROLE

whet LE, ae - A

ce Gedy ese 2

eeeatisy he

2 3 Le nate

cfr 4

Slide 39:

RISK FACTORS & MECHANISMS

“RISK IS STRONGLY*INFLUENCED BY:GENETICS, BUT

ENVIRONMENT,ALSO LIKELY PLAYS A KARGE ROLE

whet LE, ae - A

ce Gedy ese 2

eeeatisy he

2 3 Le nate

cfr 4

Slide 40:

RISK FACTORS & MECHANISMS

“RISK IS STRONGLY*INFLUENCED BY:GENETICS, BUT
ENVIRONMENT,ALSO LIKELY PLAYS A KARGE ROLE

whet LE, ae - A

ce Gedy ese 2

eeeatisy he

2 3 Le nate

cfr 4

Slide 41:

RISK FACTORS & MECHANISMS

“RISK IS STRONGLY*INFLUENCED BY:GENETICS, BUT
ENVIRONMENT,ALSO LIKELY PLAYS A KARGE ROLE

whet LE, ae - A

ce Gedy ese 2

eeeatisy he

2 3 Le nate

cfr 4

Slide 42:

RISK FACTORS & MECHANISMS

“RISK IS STRONGLY*INFLUENCED BY:GENETICS, BUT
ENVIRONMENT,ALSO LIKELY PLAYS A KARGE ROLE

whet LE, ae - A

ce Gedy ese 2

eeeatisy he

2 3 Le nate

cfr 4

Slide 43:

RISK FACTORS & MECHANISMS

RISK IS STRONGLY;INFLUENCED: BYGENETICS, BUT
ENVIRONMENT-ALSO LIKELY PLAYS-A LARGE ROLE

cere ee rae

Rout Sart, hn :

Cobar, fab Pay

Slide 44:

RISK FACTORS & MECHANISMS

“RISK IS STRONGLY:INFLUENCED BY: GENETICS, BUT
ENVIRONMENT,ALSO LIKELY. PLAYS A LARGE ROLE

coc ie ace ie

as eA Ale

=RISK FACTORS TYPICALLY ASSOCIATED WITH PRENATAL
OR PERINATAL PERIOD; 2 2“: -a* @ +

(E.G, ADVANCED PARENTAL AGE. BIRTH COMPLICAY rloNS)

SEE os

ea:

Slide 45:

RISK FACTORS & MECHANISMS

"RISK IS STRONGLY INFLUENCED BY: GENETICS, BUT ENVIRONMENT, ALSO LIKELY. PLAYS A LARGE ROLE

conceive

as a female

=RISK FACTORS TYPICALLY ASSOCIATED WITH PRENATAL OR PERINATAL PERIOD; 2 2nd: -a* @ +

(E.G, ADVANCED PARENTAL AGE. BIRTH COMPLICATIONS)

SEE os

ea:

Slide 46:

RISK FACTORS & MECHANISMS

"RISK IS STRONGLY INFLUENCED BY: GENETICS, BUT ENVIRONMENT, ALSO LIKELY. PLAYS A LARGE ROLE

conceive

as a female

=RISK FACTORS TYPICALLY ASSOCIATED WITH PRENATAL OR PERINATAL PERIOD; 2 2nd: -a* @ +

(E.G, ADVANCED PARENTAL AGE. BIRTH COMPLICATIONS)

SEE os

ea:

Slide 47:

RISK FACTORS & MECHANISMS

Pac VE

"RISK IS STRONGLY INFLUENCED BY*GENETICS, BUT ENVIRONMENT, ALSO LIKELY. PLAYS A LARGE ROLE

ongoing "egg pre oocyte

Sa Melt An Poe

=RISK FACTORS TYPICALLY ASSOCIATED WITH PRENATAL OR PERINATAL PERIOD, =r <del

~IE.6, ADVANCED PARENTAL AGE, BIRTH COMPLICATIONS)

<- gf Lis

Slide 48:

RISK FACTORS & MECHANISMS

"RISK IS STRONGLY INFLUENCED BY GENETICS, BUT ENVIRONMENT, ALSO LIKELY. PLAYS A LARGE ROLE

og "ee ge pre oe

Sa Melt An Poe

=RISK FACTORS TYPICALLY ASSOCIATED WITH PRENATAL OR PERINATAL PERIOD y ϕ ~- =1 od "el 4

~IE.6, ADVANCED PARENTAL AGE, BIRTH COMPLICATIONS!

c- ϕ LA

Slide 49:

RISK FACTORS & MECHANISMS

PTO

"RISK IS STRONGLY/INFLUENCED: BY GENETICS, BUT ENVIRONMENT, ALSO. LIKELY PLAYS A LARGE ROLE

eet en'

'4 Gay Nett Seba oN

"RISK FACTORS TYPICALLY ASSOCIATED WITH PRENATAL OR PERINATAL PERIOD, ϕ'-2 "ed Sef

~[E.G., ADVANCED PARENTAL AGE, BIRTH. COMPLICATIONS)

"UNCLEAR HOW RISK FACTORS MIGHT INTERFERE WITH DEVELOPMENT ieae

POSSIBILITIES INCLUDE EPIGENETIC EFFECTS, INFLAMMATION, 'OXIDATIVE STRESS; DAMAGE DUE TO HYPOXIA

Slide 50:

RISK FACTORS & MECHANISMS

PTO

"RISK IS STRONGLY/INFLUENCED: BY GENETICS, BUT ENVIRONMENT, ALSO. LIKELY PLAYS A LARGE ROLE

eet en'

'4 Gay Nett Seba oN

"RISK FACTORS TYPICALLY ASSOCIATED WITH PRENATAL OR PERINATAL PERIOD, ϕ'-2 "ed Sef

~[E.G., ADVANCED PARENTAL AGE, BIRTH. COMPLICATIONS)

"UNCLEAR HOW RISK FACTORS MIGHT INTERFERE WITH

DEVELOPMENT ieae

POSSIBILITIES INCLUDE EPIGENETIC;EFFECTS, INFLAMMATION,
'OXIDATIVE STRESS; DAMAGE DUE TO.HYPOXIA

Slide 51:

RISK FACTORS & MECHANISMS

>. On

"RISK IS STRONGLY«INFLUENCED BY:GENETICS, BUT
ENVIRONMENT, ALSO LIKELY PLAYS A LARGE ROLE

a "e "oh a be op \

ft a, hed Fe

"RISK FACTORS TYPICALLY, ASSOCIATED WITH PRENATAL
OR PERINATAL PERIOD , $\phi = te\ 74\ "i\ +)$

~(E.G,, ADVANCED P; RENTAL. AGE, BIRTH, COMPLICATI jONS)

"UNCLEAR HOW RISK FACTORS MIGHT INTERFERE WITH
DEVELOPMENT Ss ary

"POSSIBILITIES INCLUDE EPIGENETIC:EFFECTS, INFLAMMATION,
OXIDATIVE STRESS, DAMAGE. DUE TO.HYPOXIA

Slide 52:

RISK FACTORS & MECHANISMS

>. On

"RISK IS STRONGLY«INFLUENCED BY:GENETICS, BUT
ENVIRONMENT, ALSO LIKELY PLAYS A LARGE ROLE

a "e "oh a be op \

ft a, hed Fe

"RISK FACTORS TYPICALLY, ASSOCIATED WITH PRENATAL
OR PERINATAL PERIOD , $\phi = te\ 74\ "i\ +)$

~(E.G,, ADVANCED P; RENTAL. AGE, BIRTH, COMPLICATI jONS)

"UNCLEAR HOW RISK FACTORS MIGHT INTERFERE WITH
DEVELOPMENT Ss ary

"POSSIBILITIES INCLUDE EPIGENETIC:EFFECTS, INFLAMMATION,
OXIDATIVE STRESS, DAMAGE. DUE TO.HYPOXIA

Slide 53:

RISK FACTORS & MECHANISMS

>. On

“RISK IS STRONGLY «INFLUENCED BY: GENETICS, BUT ENVIRONMENT, ALSO LIKELY PLAYS A LARGE ROLE

a “e “oh a be op \

ft a, hed Fe

“RISK FACTORS TYPICALLY, ASSOCIATED WITH PRENATAL OR PERINATAL PERIOD , $\phi = te\ 74\ "i\ +)$

~(E.G., ADVANCED P; RENTAL. AGE, BIRTH, COMPLICATI jONS)

“UNCLEAR HOW RISK FACTORS MIGHT INTERFERE WITH DEVELOPMENT Ss ary

“POSSIBILITIES INCLUDE EPIGENETIC: EFFECTS, INFLAMMATION, OXIDATIVE STRESS, DAMAGE. DUE TO. HYPOXIA

Slide 54:

RISK FACTORS & MECHANISMS

>. On

“RISK IS STRONGLY «INFLUENCED BY: GENETICS, BUT ENVIRONMENT, ALSO LIKELY PLAYS A LARGE ROLE

a “e “oh a be op \

ft a, hed Fe

“RISK FACTORS TYPICALLY, ASSOCIATED WITH PRENATAL OR PERINATAL PERIOD , $\phi = te\ 74\ "i\ +)$

~(E.G., ADVANCED P; RENTAL. AGE, BIRTH, COMPLICATI jONS)

“UNCLEAR HOW RISK FACTORS MIGHT INTERFERE WITH DEVELOPMENT Ss ary

“POSSIBILITIES INCLUDE EPIGENETIC: EFFECTS, INFLAMMATION, OXIDATIVE STRESS, DAMAGE. DUE TO. HYPOXIA

Slide 55:

RISK FACTORS & MECHANISMS

>. On

“RISK IS STRONGLY «INFLUENCED BY: GENETICS, BUT ENVIRONMENT, ALSO LIKELY PLAYS A LARGE ROLE

a “e “oh a be op \

ft a, hed Fe

“RISK FACTORS TYPICALLY, ASSOCIATED WITH PRENATAL

OR PERINATAL PERIOD , $\phi = te 74$ "i +)

~(E.G., ADVANCED P; RENTAL. AGE, BIRTH, COMPLICATI jONS)

"UNCLEAR HOW RISK FACTORS MIGHT INTERFERE WITH
DEVELOPMENT Ss ary

"POSSIBILITIES INCLUDE EPIGENETIC:EFFECTS, INFLAMMATION,
OXIDATIVE STRESS, DAMAGE. DUE TO.HYPOXIA

Slide 56:

RISK FACTORS & MECHANISMS

>. On

"RISK IS STRONGLY«INFLUENCED BY:GENETICS, BUT
ENVIRONMENT, ALSO LIKELY PLAYS A LARGE ROLE

a "e "oh a be op \

ft a, hed Fe

"RISK FACTORS TYPICALLY, ASSOCIATED WITH PRENATAL
OR PERINATAL PERIOD , $\phi = te 74$ "i +)

~(E.G., ADVANCED P; RENTAL. AGE, BIRTH, COMPLICATI jONS)

"UNCLEAR HOW RISK FACTORS MIGHT INTERFERE WITH
DEVELOPMENT Ss ary

"POSSIBILITIES INCLUDE EPIGENETIC:EFFECTS, INFLAMMATION,
OXIDATIVE STRESS, DAMAGE. DUE TO.HYPOXIA

Slide 57:

RISK FACTORS & MECHANISMS

>. On

"RISK IS STRONGLY«INFLUENCED BY:GENETICS, BUT
ENVIRONMENT, ALSO LIKELY PLAYS A LARGE ROLE

a "e "oh a be op \

ft a, hed Fe

"RISK FACTORS TYPICALLY, ASSOCIATED WITH PRENATAL
OR PERINATAL PERIOD , $\phi = te 74$ "i +)

~(E.G., ADVANCED P; RENTAL. AGE, BIRTH, COMPLICATI jONS)

"UNCLEAR HOW RISK FACTORS MIGHT INTERFERE WITH
DEVELOPMENT Ss ary

"POSSIBILITIES INCLUDE EPIGENETIC:EFFECTS, INFLAMMATION,
OXIDATIVE STRESS, DAMAGE. DUE TO.HYPOXIA

Slide 58:

RISK FACTORS & MECHANISMS

se

“RISK IS STRONGLY INFLUENCED: BY GENETICS, BUT ENVIRONMENT, ALSO LIKELY PLAYS “A LARGE ROLE

and “the yet to be

feeding head end

=RISK FACTORS TYPICALLY, ASSOCIATED WITH PRENATAL OR PERINATAL PERIOD, 2nd - 3rd trimester

with E.G., ADVANCED PARENTAL AGE, BIRTH COMPLICATIONS)

focus on plas

“UNCLEAR HOW RISK FACTORS. MIGHT INTERFERE WITH DEVELOPMENT and

~POSSIBILITIES INCLUDE EPIGENETIC EFFECTS, INFLAMMATION, OXIDATIVE STRESS, DAMAGE DUE TO HYPOXIA,

Slide 59:

RISK FACTORS & MECHANISMS

se

“RISK IS STRONGLY INFLUENCED: BY GENETICS, BUT ENVIRONMENT, ALSO LIKELY PLAYS “A LARGE ROLE

and “the yet to be

feeding head end

=RISK FACTORS TYPICALLY, ASSOCIATED WITH PRENATAL OR PERINATAL PERIOD, 2nd - 3rd trimester

with E.G., ADVANCED PARENTAL AGE, BIRTH COMPLICATIONS)

focus on plas

“UNCLEAR HOW RISK FACTORS. MIGHT INTERFERE WITH DEVELOPMENT and

~POSSIBILITIES INCLUDE EPIGENETIC EFFECTS, INFLAMMATION, OXIDATIVE STRESS, DAMAGE DUE TO HYPOXIA,

Slide 60:

WWW.NEUROCHALLENGED.COM