

Frummaðurinn og nútíminn

ÞARMAR MEÐ SJARMA!
MÁLÞING NLFÍ

HARALDUR ERLENDSSON LÆKNIR

10. NÓVEMBER 2015

Fræðslunefnd Náttúrlækningafélags Íslands efnir til
málþings á Icelandair Hótel Reykjavík Natura, þingsal 1
þriðjudaginn 10. nóvember 2015 kl. 20:00

Þarmar með sjarma!

Hollt mataræði – Betri melting
– Heilbrigðir þarmar

- Eru þarmar með sjarma?
- Er fæði frummannsins betra fyrir þarmana?
- Eru þarmar matvandir?
- Byrjar og endar heilsa okkar í þörmunum?
- Eru tengsl milli þarma og ADHD?
- Hefur sykurneysla áhrif á þarma?

Frummaðurinn og nútíminn

Haraldur Erlendsson geðlæknir og forstjóri
Heilsustofnunar NLFÍ.

Þarmar með sjarma

Rakel Fleckenstein Björnsdóttir þýðandi.

Þarmaflóran – okkar eigin hönnun

Birna G. Ásbjörnsdóttir MSc í næringarlæknisfræði
og MSc nemi í gagnreyndum heilbrigðisvísindum.

Pallborðsumræður að loknum erindum



Margrét Grímsdóttir



Haraldur Erlendsson



Rakel F. Björnsdóttir



Birna G. Ásbjörnsdóttir

Fundarstjóri er Margrét Grímsdóttir
framkvæmdastjóri hjúkrunar
á Heilsustofnun NLFÍ.

Allir velkomnir.
Aðgangseyrir 2.000 kr.
Frítt fyrir félagsmenn.

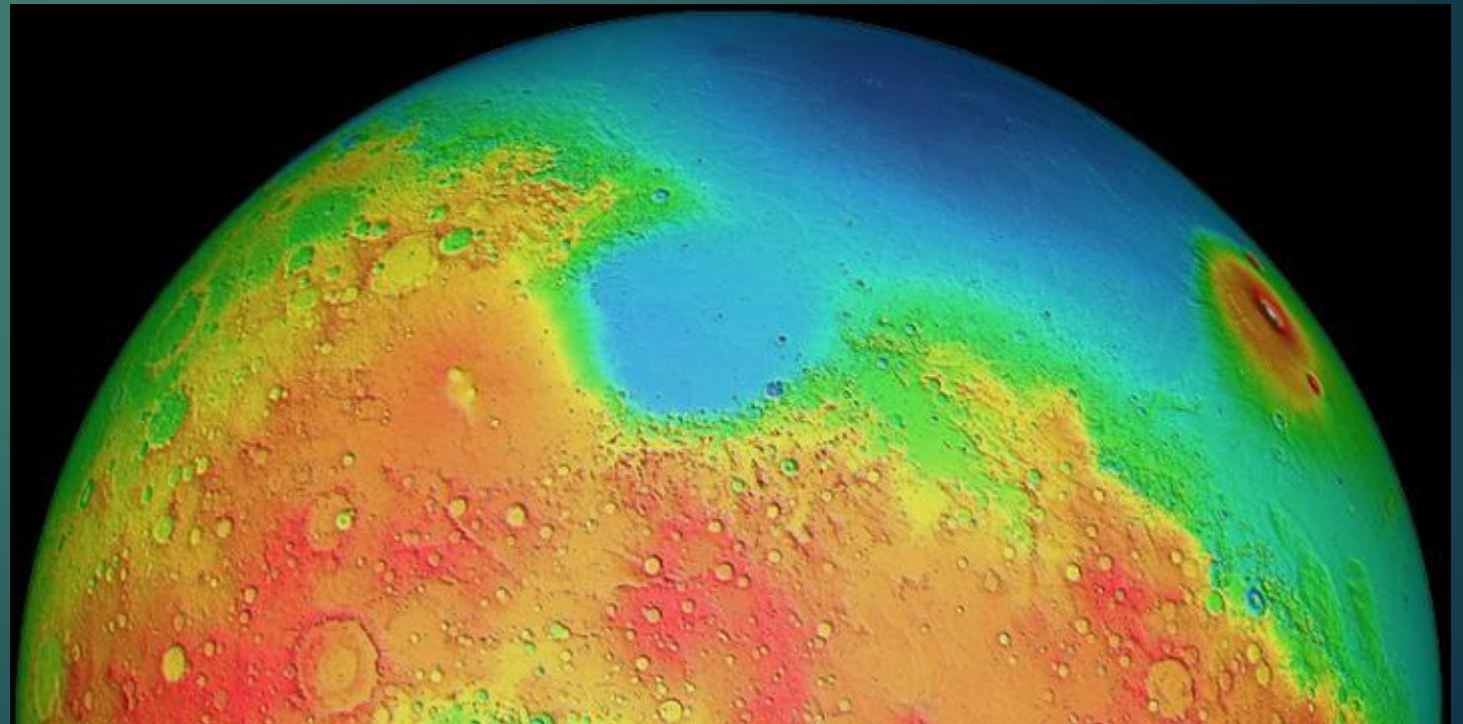


Berum ábyrgð á eigin heilsu



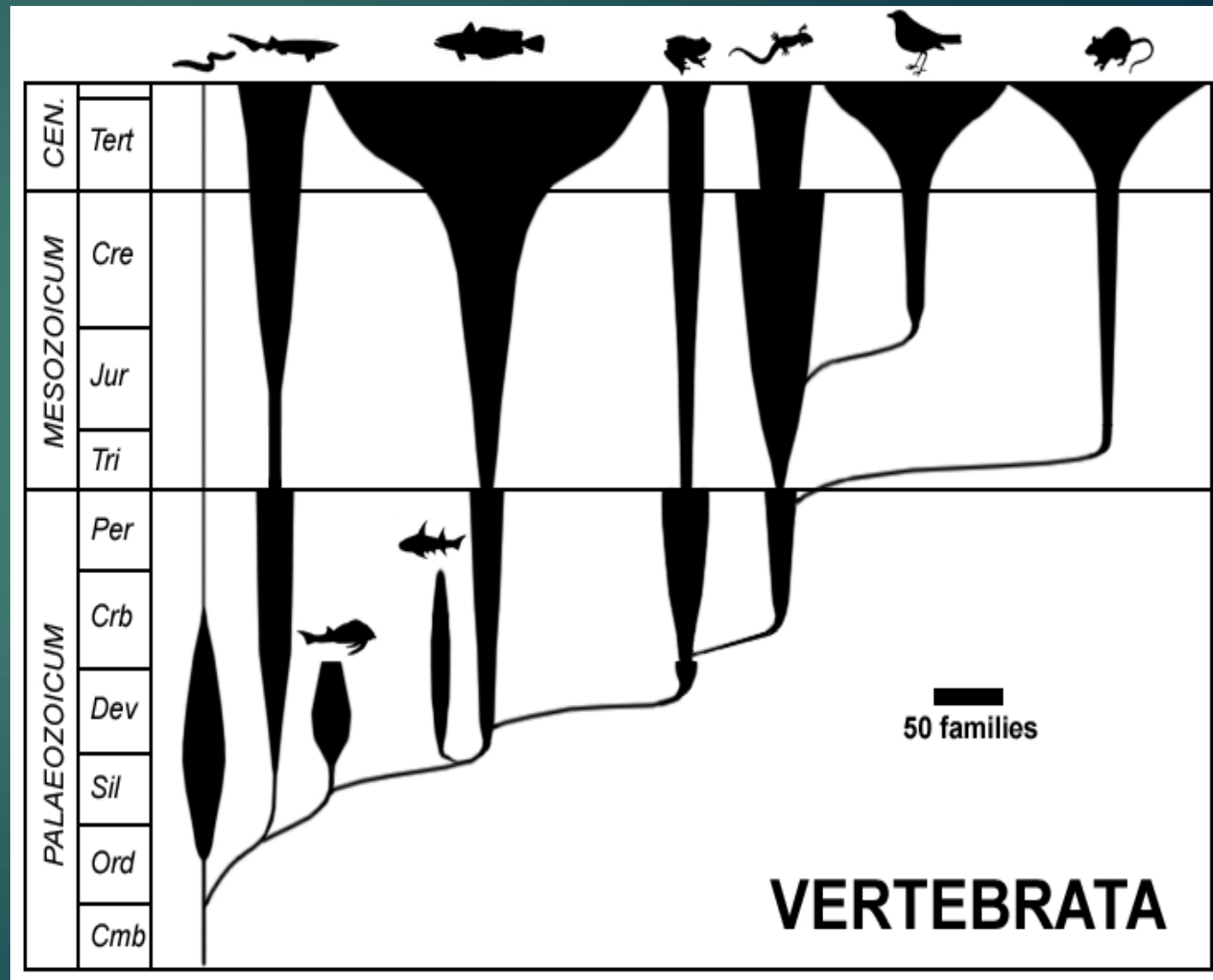
Þróun lífsins á jörðinni

- ▶ Jörðin 4.5 billjón ára gömul
- ▶ Fyrstu lífverurnar komu fram fyrir um 3.5 billjón árum
- ▶ DNA RNA – byrjun lífsins!
- ▶ Vírusar
- ▶ Einfrumungar – Archaea
 - ▶ Bakteríur
 - ▶ Sveppir
 - ▶ Plöntur/ þörungar
 - ▶ Dýr

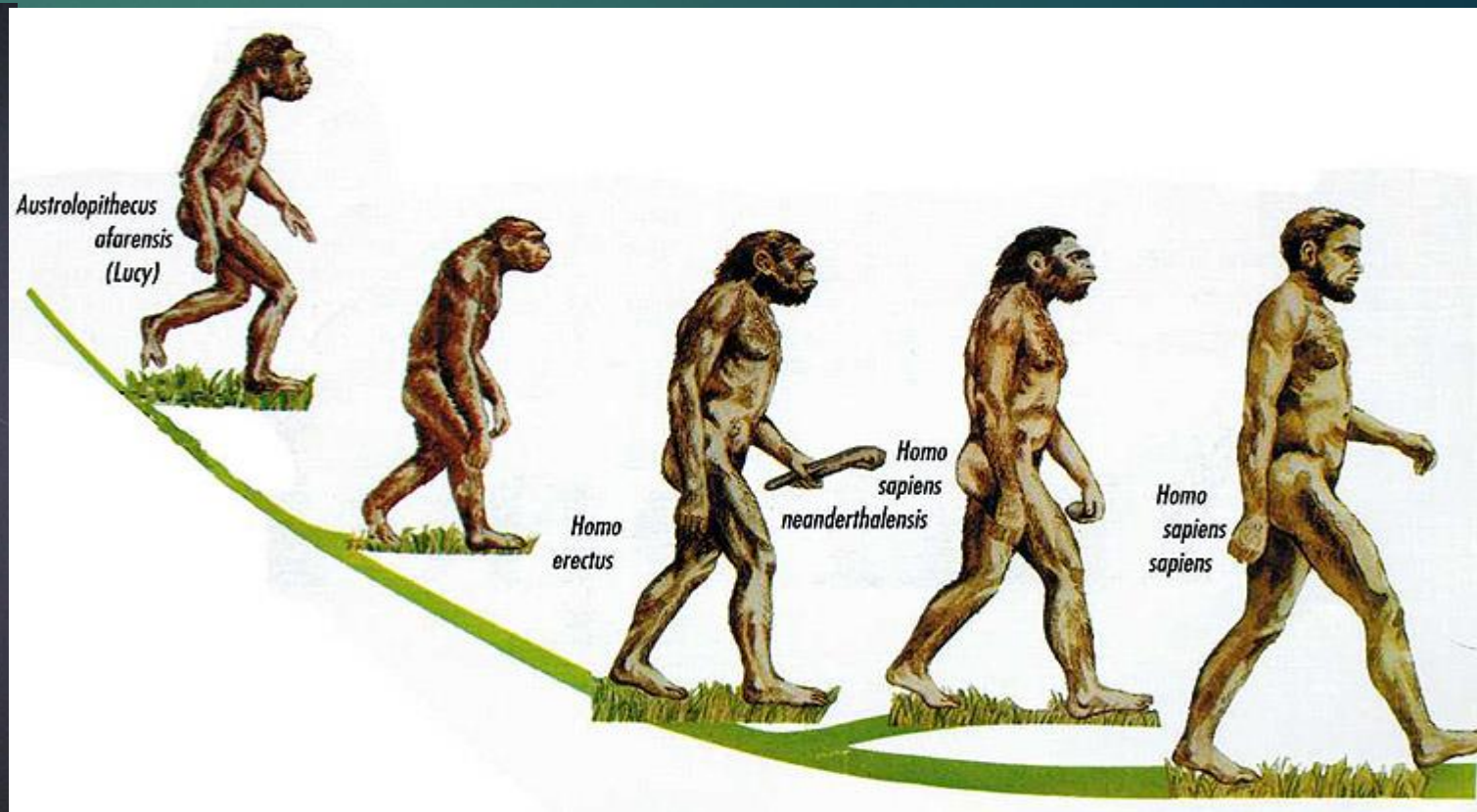


Þróun dýranna á jörðinni

- ▶ Fjölfurumungar
- ▶ Ormar
- ▶ Hryggdýrin
- ▶ Fiskarnir 530 milljón ár
- ▶ Eðlurnar 315 milljón ár
- ▶ Spendýrin 225 milljón ár
- ▶ Fuglarnir 160 milljón ár
- ▶ Aþarnir – Hominoidea 55m



Homo - maðurinn 3m ár
Homo erectus 1.9m ár
Homo sapiens 300.000 ár



Mannslíkaminn er vistkerfi af lífverum

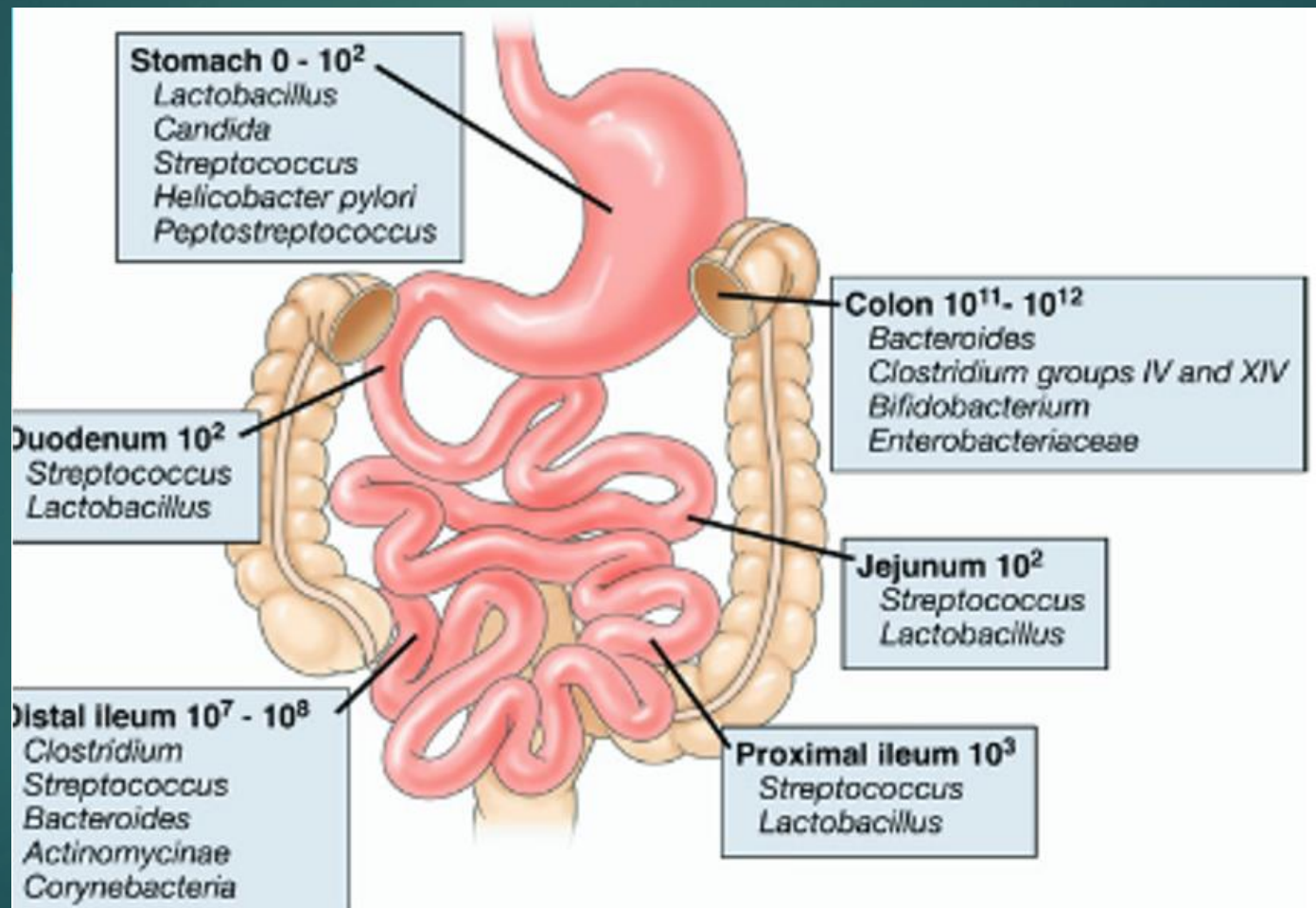


Görnin og lífverurnar í henni

- ▶ Microbiota / microbiome
- ▶ Frá móður, mat og umhverfi
- ▶ 10x fleiri en frumur líkamans – 2kg
 - ▶ Vírusar
 - ▶ Sveppir
 - ▶ Bakteríur
 - ▶ Einfrumungar
 - ▶ Ormar og skordýr
 - ▶ ? Þörungar - algae!!
 - ▶ ? Tré og blóm!!



Mest af lífi í ristlinum



Móðirin gefur fyrsta lífríkið

MATTER

Human Microbiome May Be Seeded Before Birth

By CARL ZIMMER

Published: August 29, 2013

Mouth

- Amniotic fluid bacteria with an oral origin include *Fusobacterium nucleatum*, *Streptococcus* spp., *Bergeyella* spp., *Porphyromonas gingivalis*, *Rothia dentocariosa*, and *Filifactor alocis*.
- Oral bacteria are likely transmitted to the uterus via the blood stream, especially if gingiva inflammation is present.

Internal Breast

- Aseptically-collected breast milk contains 100-600 OTUs. Abundant genera include *Streptococcus*, *Staphylococcus*, *Serratia*, *Corynebacteria*, *Lactococcus*, *Weisella*, and *Leuconostoc*.
- An entero-mammary pathway brings gut bacteria to the mammary gland via lymph and blood circulation. External sources of milk microbes include the maternal skin and infant oral cavity.

External Breast

- The sebaceous skin of the breast is an external source of microbes for breast milk (*Staphylococcus* and *Corynebacteria*) but may also provide skin bacteria not common in milk (such as *Propionibacteria*) to the suckling infant.

Uterus

- Contrary to the "sterile womb" paradigm, bacteria are found in umbilical cord blood, amniotic fluid, fetal membranes, and meconium of healthy, term infants.
- Meconium microbiomes are dominated by Enterobacteriaceae (*Escherichia* and *Shigella*) and lactic acid bacteria (*Leuconostoc*, *Enterococcus*, and *Lactococcus*).
- Microbes likely gain access to the womb through ascension from the vagina and/or through the blood stream for bacteria of intestinal or oral origin.

Vagina

- Vaginal microbial communities vary significantly among women of different ethnicities and could influence which microbes are transferred to an infant.
- The vaginal microbiota becomes less diverse during pregnancy while certain *Lactobacillus* species become enriched.
- The initial microbiota of vaginally-born infants resembles that of their mother's vagina, while that of C-section infants is dominated by skin and environmental bacteria.

Mom Knows Best: The Universality of Maternal Microbial Transmission

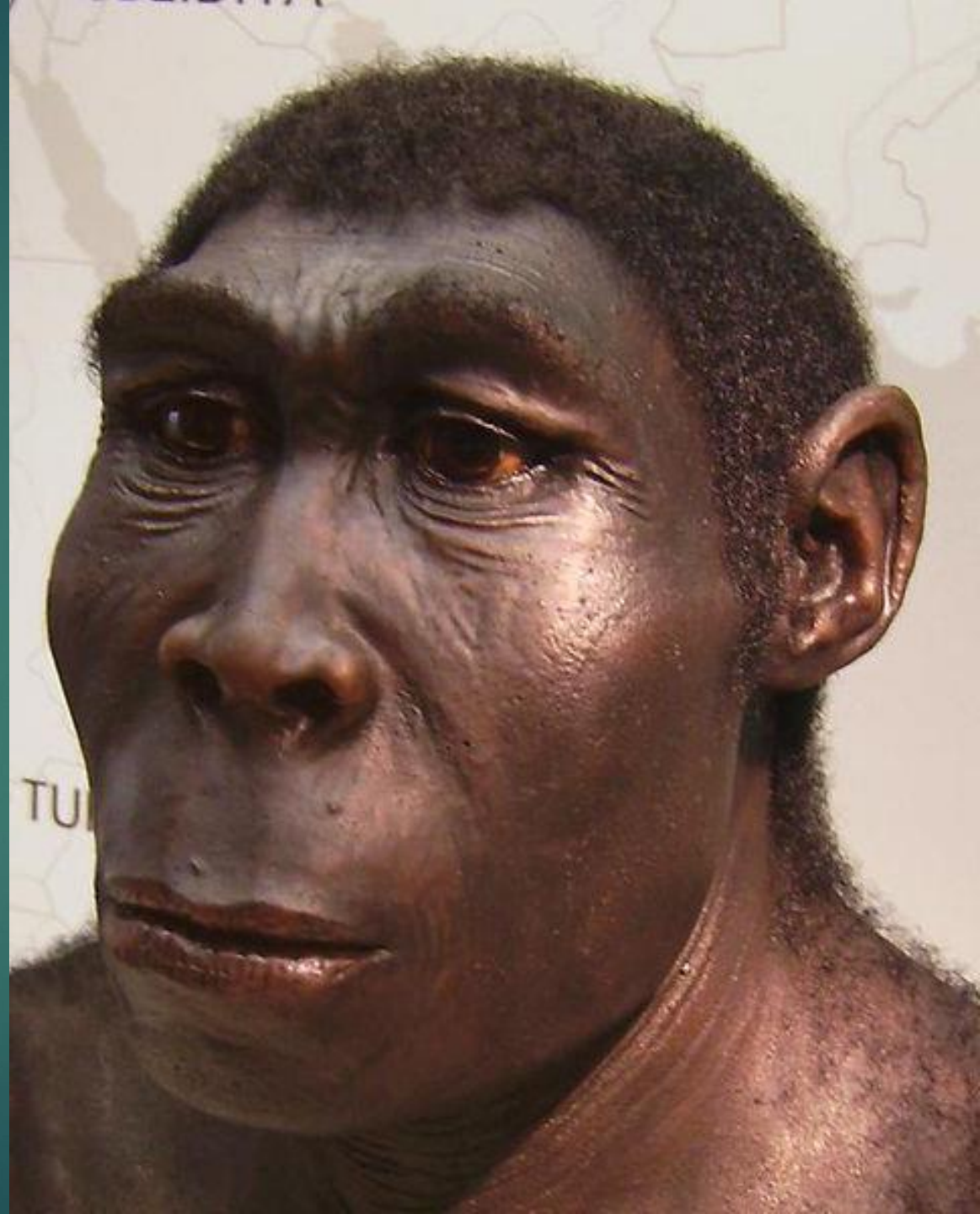
Lisa J. Funkhouser
Seth R. Bordenstein

Soðinn matur – lifandi fæða



Homo Erectus

- ▶ Maðurinn finnur upp eldinn
- ▶ Eldar mat
- ▶ Meiri orka / hungrið minnar
- ▶ Meiri tími til að hugsa
- ▶ Heilinn stækkar
- ▶ Styttri görn, minni tennur og kjálki
- ▶ Talar – tungumálið þróast



Elsta eldstæðið

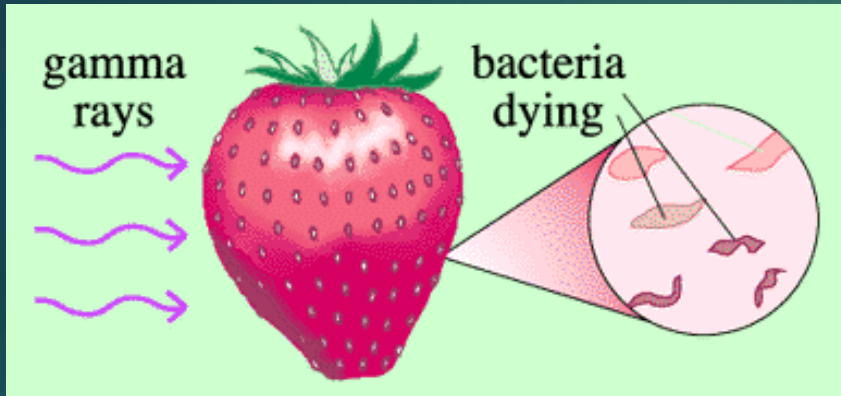
- ▶ Suðurafríka - Cape
- ▶ Wonderwerk hellirinn
- ▶ Aska, lauf, bein, greinar
- ▶ 1.800.000 ár
- ▶ Kenya 1.5m
- ▶ Ísrael 0.7m



Breytt matarræði

- ▶ Hveiti
- ▶ Mjólk
- ▶ Sykur
- ▶ Áhrif á flóruna í görninni
- ▶ Áhrif á heilan
- ▶ Áhrif á andlegt ástand
- ▶ Áhrif á ofnæmiskerfið
- ▶ ...

Geislun á mat – svo endist betur



Úr skóginum í nútíma híbýli

Fábreyttara lífríki



Takmörk erfðafræðinnar

A Decade Later, Genetic Map Yields Few New Cures

By NICHOLAS WADE

Published: June 12, 2010

Ten years after President Bill Clinton announced that the first draft of

Covering Health

MONITORING THE PULSE OF HEALTH CARE JOURNALISM

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Were journalists 'fabulously naïve' about human genome?

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The human genome project, 10 years in: Did they oversell the revolution?

PAUL TAYLOR

The Globe and Mail

Published Thursday, Feb. 17 2011, 5:55 PM EST

WNYC News

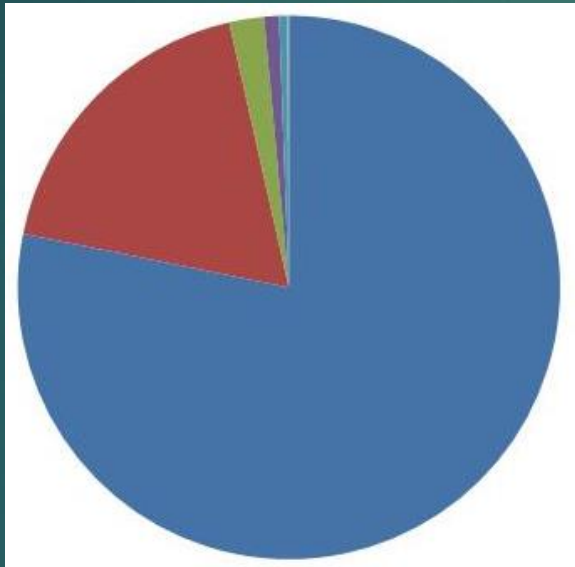
The Human Genome Project: 10 Years Later, Progress but Still a Puzzle

Lífverurnar sem fylgja manninum

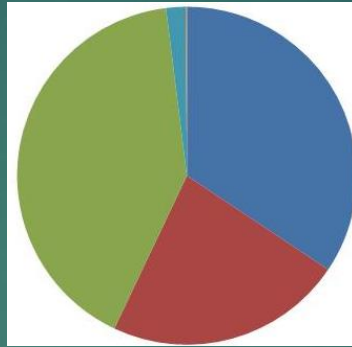
- ▶ Nóbelsverðlaunhafinn Joshua Lederberg
- ▶ Hugtak um erfðamengi mannsins
- ▶ **"microbiome"**
- ▶ Allt erfðaefni vistkerfis mannsins
- ▶ Ekki bara „mannsins“
- ▶ Lora Hooper and Jeff Gordon (Commensal Host-Bacterial Relationships in the Gut Science 11 May 2001: Vol. 292. no. 5519, pp. 1115 – 1118)

Bakteríur og sjúkur ristill

Average Healthy

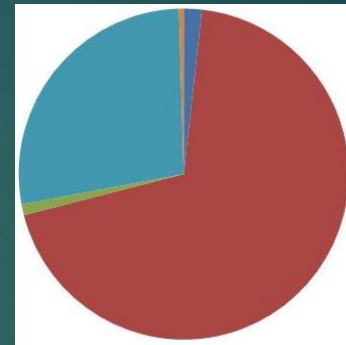


Average
Ulcerative Colitis



Explosion of
Proteobacteria

Average
Crohn's Disease



Collapse of Bacteroidetes
Explosion of Actinobacteria

Dysbiosis – Trufluð flóra

- ▶ Góð flóra hverfur
- ▶ Ný flóra kemur eða ofmikið af einhverjum fáeinum
- ▶ Getur verið erfitt að leiðrétta



Hvað breytir flórunni

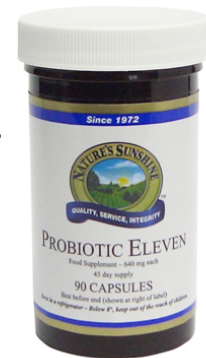
- ▶ Lyf: sýklalyf, sterar, hormón, ...
- ▶ matarræði
- ▶ mengun, alkóhól, eitur
- ▶ sýkingar,
- ▶ streita
- ▶ geislun
- ▶ öldrun

Probiotic – Örverubættandi meðferð

- ▶ Bæta má ástandið
- ▶ Lifandi matur
- ▶ Örverur í hylkjum
- ▶ Saurgjöf!

Introducing Probiotic 11!

- ✓ A high potency, broad spectrum probiotic.
- ✓ 11 different strains of friendly bacteria.
- ✓ Contains almost 12 billion bacteria per serving.
- ✓ Enteric coated to disperse in the intestines.
- ✓ In a prebiotic blend to spread and nourish.



Fecal transplant: Sounds gross but saves lives

ERIK ORTIZ

Thursday, September 27, 2012

An Atlanta-area woman found relief from a bacterial infection in her colon when her mom provided a life-saving transplant — involving fecal matter.

While a fecal-matter transplant sounds stomach turning, it ensured 20-year-old Kaitlin Hunter a normal life again after a devastating car accident that nearly killed her.

"I've been so happy," Hunter, of Marietta, told CNN on Wednesday after the July surgery. "I'm cured."

Hunter's ordeal began after a June 2011 car accident in California that left her with a fractured spine and damaged liver and colon, CNN said.

f Recommend 96

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Tweet



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+1



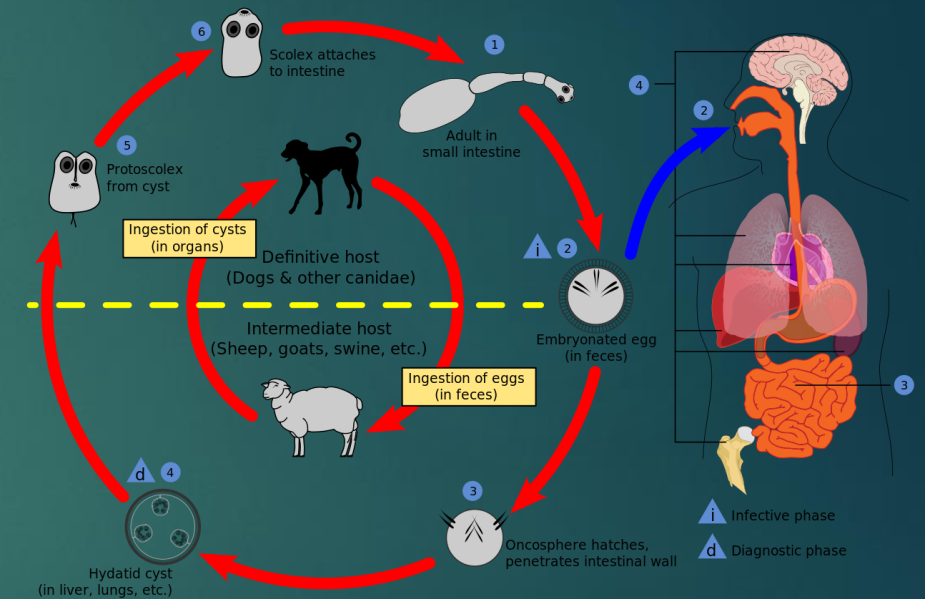
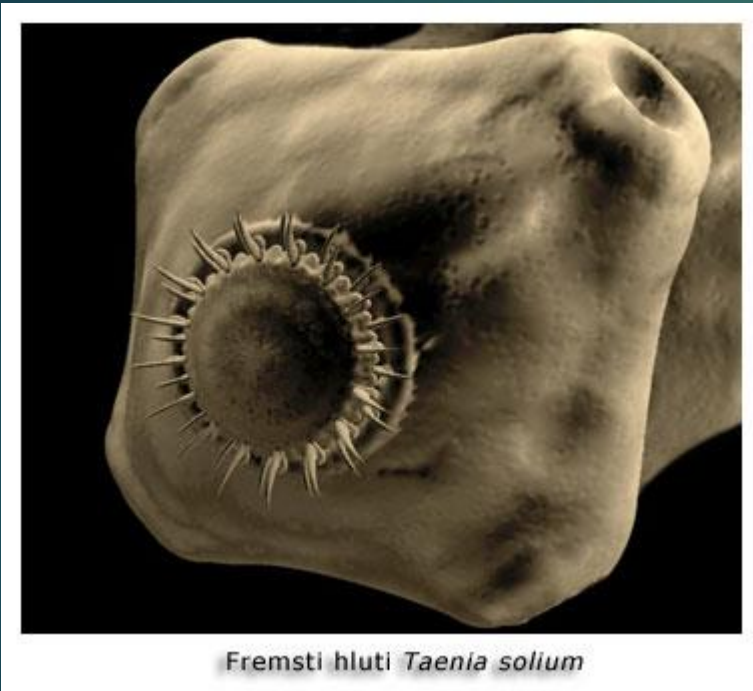
Kaitlin Hunter of Marietta, Ga., who underwent a fecal transplant from...

Sömu gen en mikill munur



Bandormar – maður og dýr

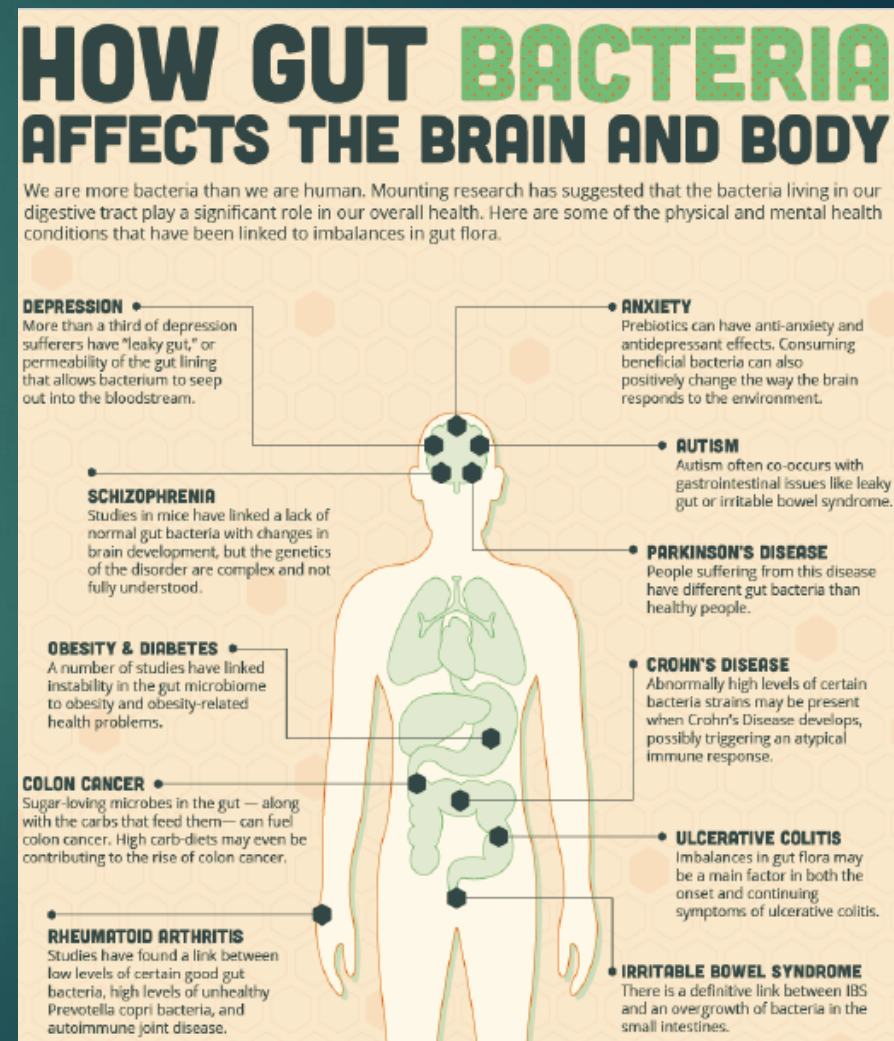
100 ár – betri heilsa ... og verri



Svína orma egg við ofnæmi, Crohns, MS, astma

Breytt garnaflóra – orsök eða afleiðing

- ▶ Bólgusjúkdómar í ristli
 - ▶ Offita
 - ▶ Sykursýki
 - ▶ Ofnæmi
 - ▶ Liðagigt
 - ▶ Vefjagigt
 - ▶ MS
 - ▶ Vöðvarýrnun
- Krabbamein
 - Geðklofi
 - Þunglyndi
 - Geðhvarfasýki
 - Kvíði
 - Parkisons sjúkdómur*
 - Einhverfa*
 - ADHD*
 - „Leaky gut syndrome“



TAKK FYRIR

GRACIAS
ARIGATO
SHUKURIA
GOZAIMASHITA
EFCHARISTO
JUSPAXAR
DANKSCHEEN
SPASSIBO
NUHUN
SNACHALHUYA
CHALTU
YAQHANYELAY
TASHAKKUR ATU
WABEEJA
MATTEKA
YUSPAGADATAM
HUI
SUKSAMA
EKHMET
SPASIBO
DENKAUJA
HENACHALHYA
UNALCHEESH
TINGKI
BIYAN
SHUKRIA
HATUR
GUL
EKOJU
SIKOMO
MAKETAI
MINMONCHAR
BOLZIN
MERCY
GRAZIE
MEHRBANI
PALDIES
MAAKE
ATTO
ANHA
DHANYABAD
MERASTAWHY
GAEJTHO
AGUYJE
FAKAAUE
KOMAPSUMNIDA
LAH