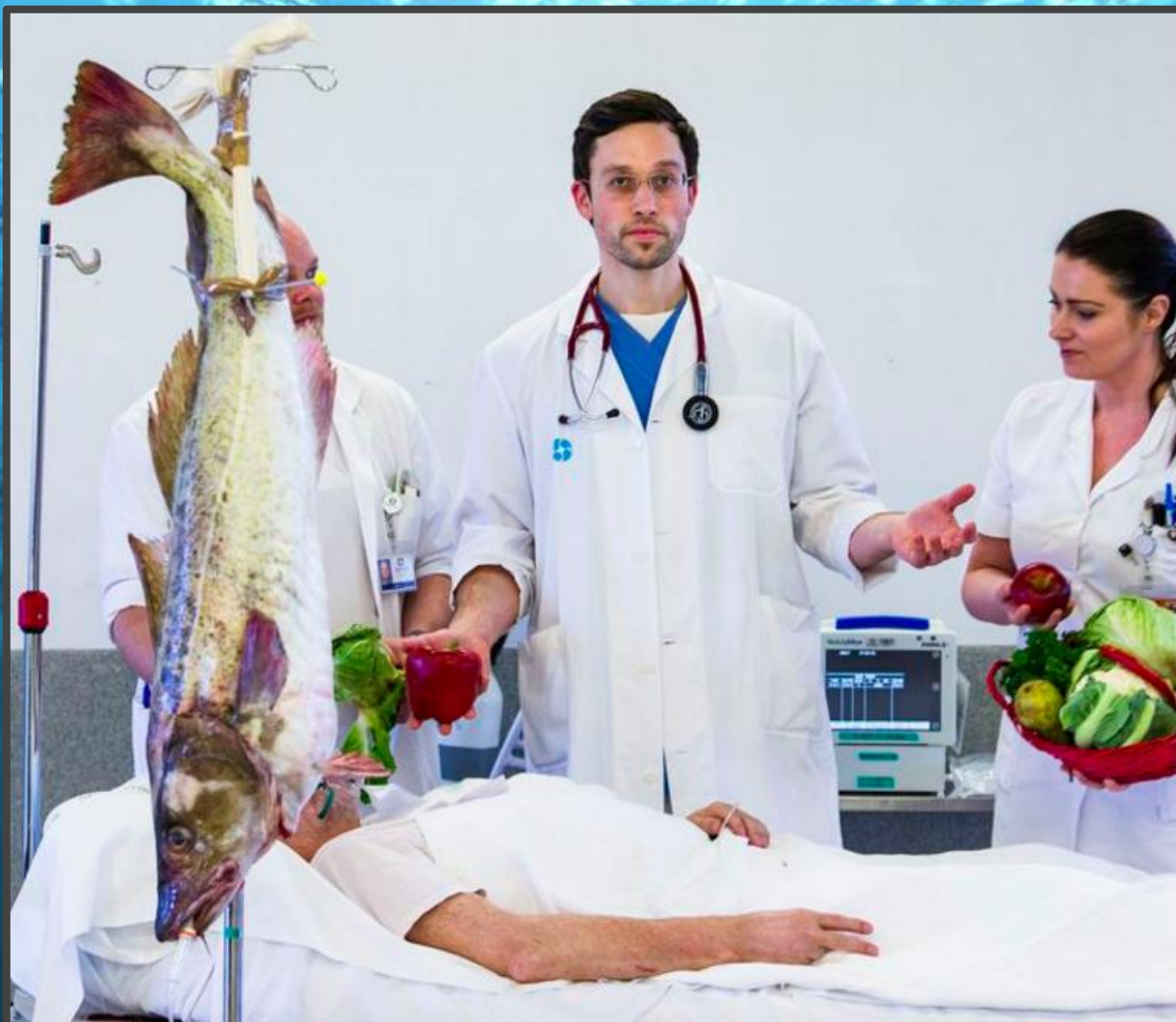


# MÁTTUR MATARINS

Guðmundur Jóhannsson  
Lyf- og bráðalæknir

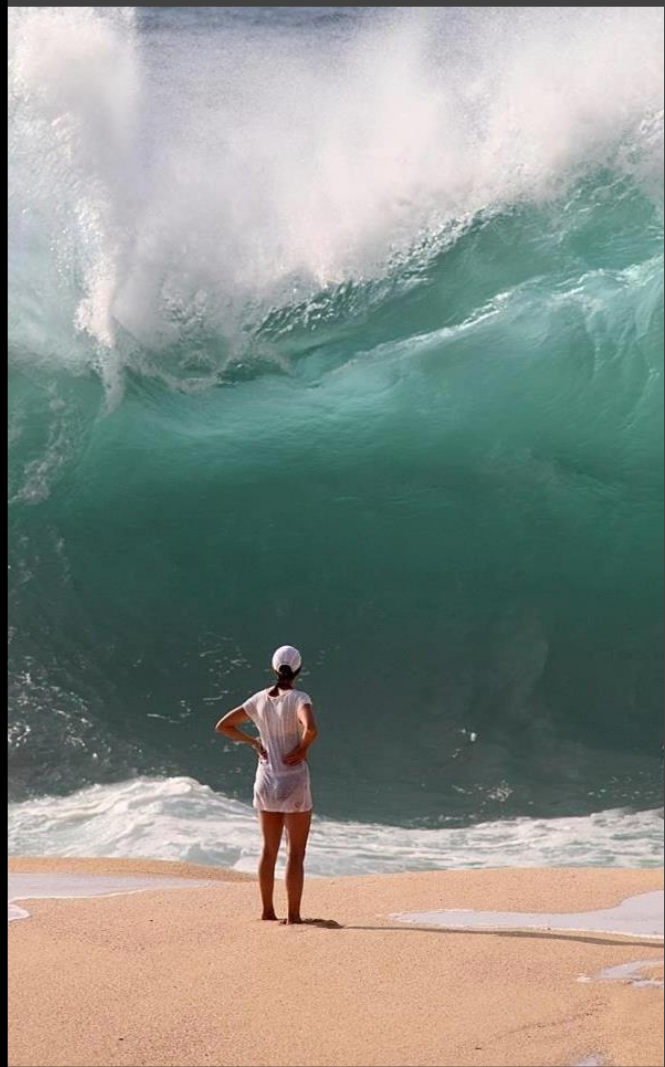












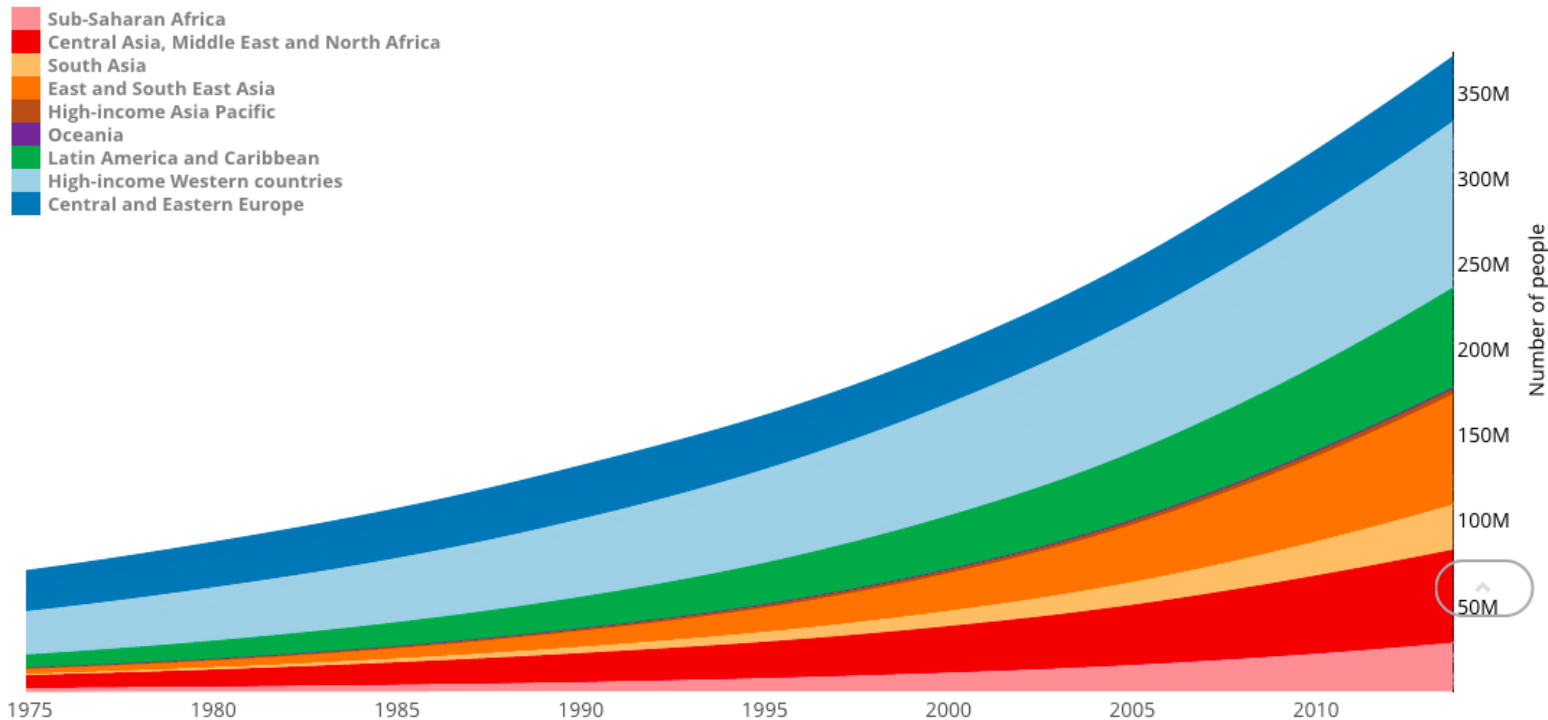
# DIABETES



# Vaxandi sjúkdómsbyrði - offita

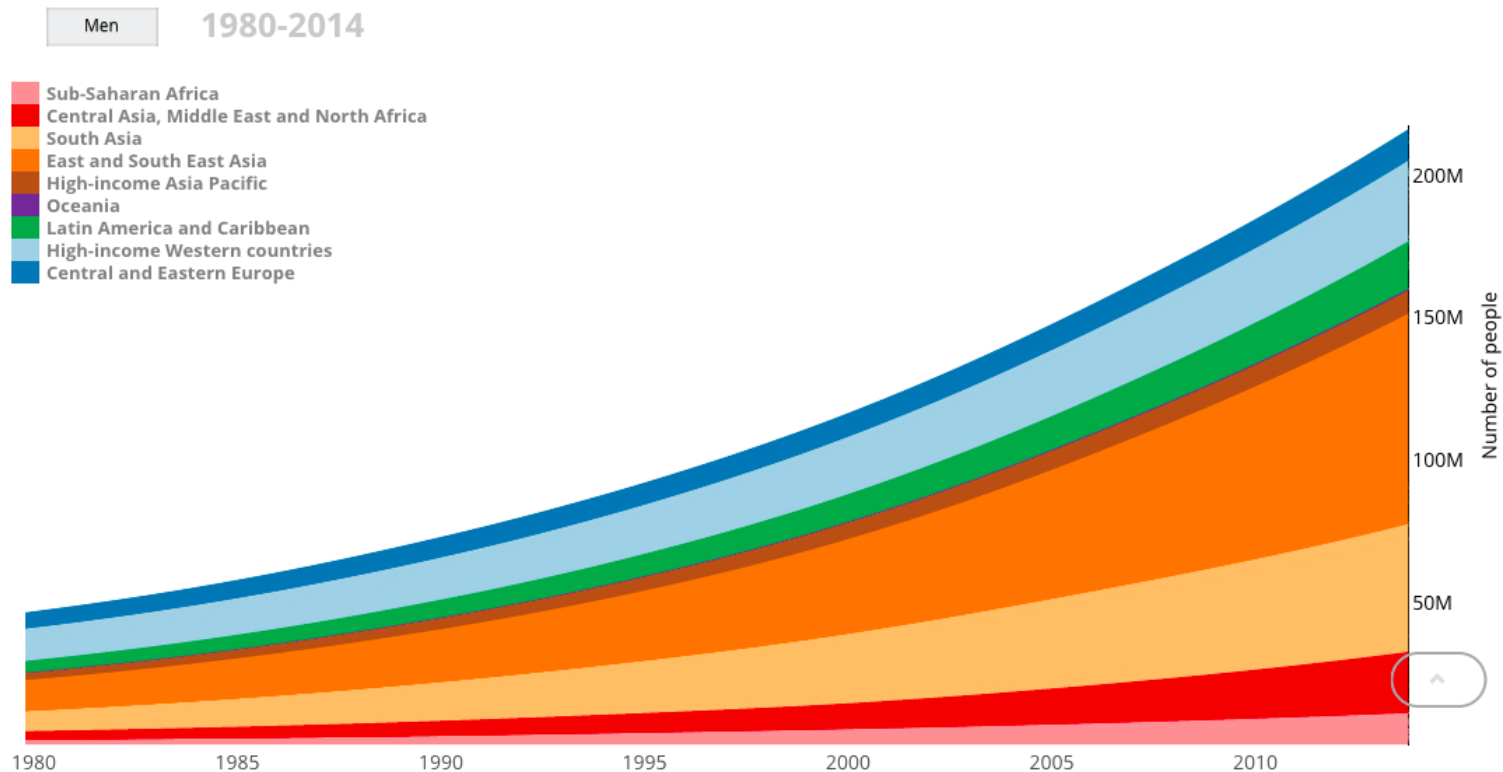
## Women

1975-2014





# Vaxandi sjúkdómsbyrði - sykursýki







The World's  
SHORTEST  
Diet Book

Eat Less.  
Exercise More.  
Repeat.

The End.



TWEET

SHARE

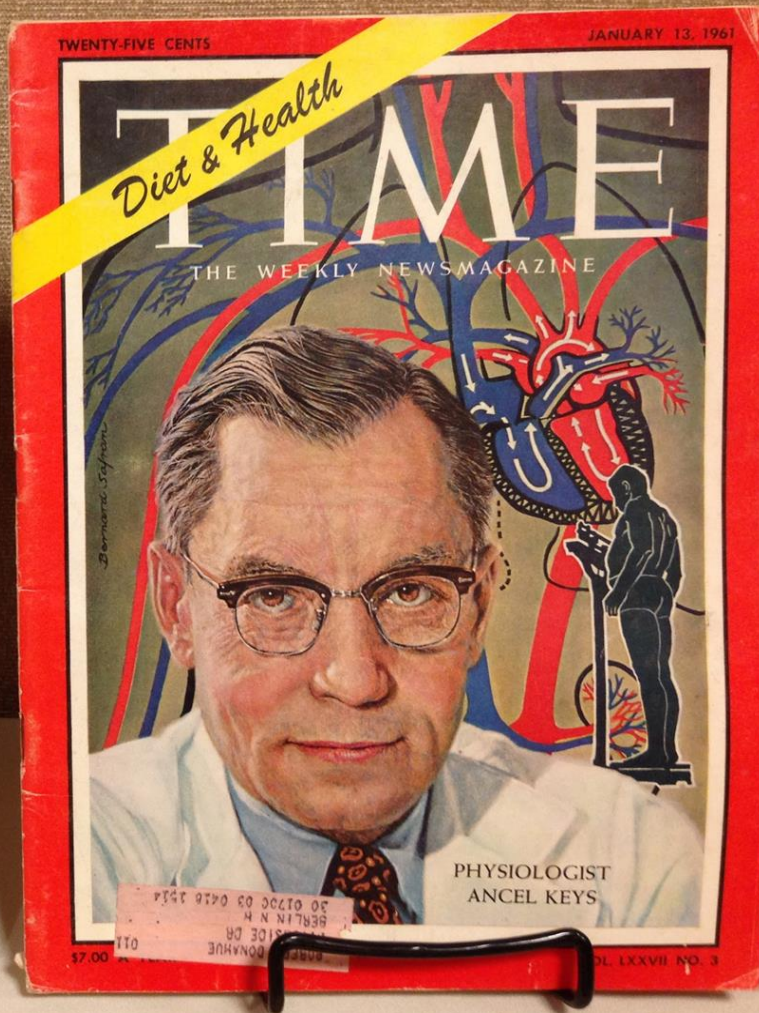
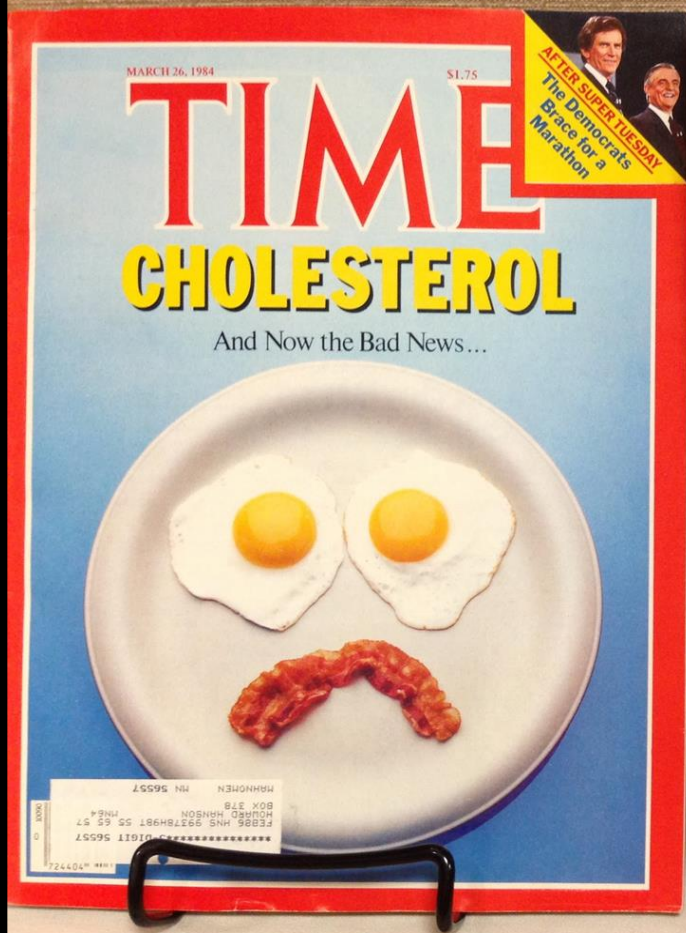
# Why you shouldn't exercise to lose weight, explained with 60+ studies

*by Julia Belluz and Javier Zarracina on April 28, 2016*

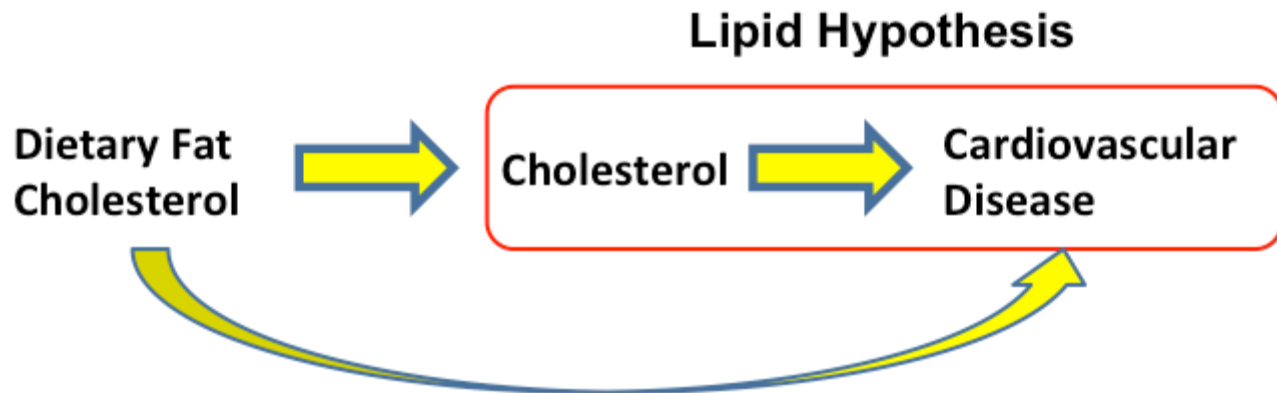




A large, light gray question mark is positioned on the right side of the image, partially overlapping the dark background and the person's face. The question mark is stylized with a thick, rounded top and a solid rectangular base.



# Diet-Heart Hypothesis







# Food Guide Pyramid

## A Guide to Daily Food Choices

Fats, Oils, & Sweets  
**USE SPARINGLY**

Milk, Yogurt,  
& Cheese  
Group  
**2-3 SERVINGS**

Vegetable  
Group  
**3-5 SERVINGS**

Meat, Poultry, Fish,  
Dry Beans, Eggs,  
& Nuts Group  
**2-3 SERVINGS**

Fruit  
Group  
**2-4 SERVINGS**

Bread, Cereal,  
Rice, & Pasta  
Group  
**6-11  
SERVINGS**

### KEY

◻ Fat (naturally occurring  
and added)

◻ Sugars  
(added)

These symbols show fat and  
added sugars in foods.

SOURCE: U.S. Department of Agriculture/U.S. Department of Health and Human Services

Use the Food Guide Pyramid to help you eat better every day...the Dietary Guidelines way. Start with plenty of Breads, Cereals, Rice, and Pasta; Vegetables; and Fruits. Add two to three servings from the Milk group and two to three servings from the Meat group. Each of these

food groups provides some, but not all, of the nutrients you need. No one food group is more important than another — for good health you need them all. Go easy on fats, oils, and sweets, the foods in the small tip of the Pyramid.

**VÍSIR**

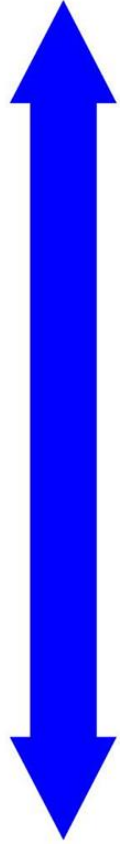
Þriðjudagur 6. október 1961

viðtal dagsins

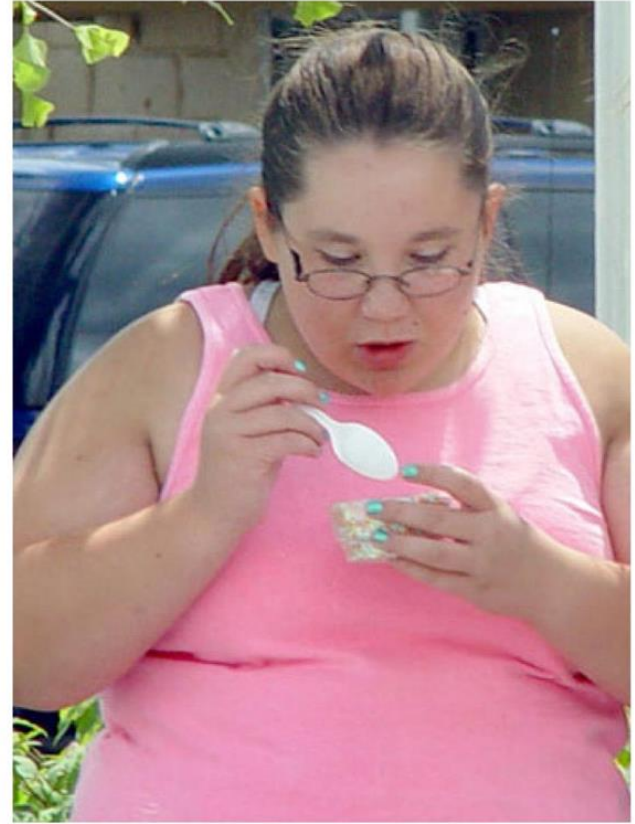
**„BEST AÐ BORÐA 6-8  
BRAUÐSNEIÐAR Á DAG”**



**Vertical growth out of regulation:  
Clearly a “hormone” problem**



**Horizontal growth out of regulation:  
Not a “hormone” problem?**





## Hvað borða Íslendingar?

### Breytingar á mataræði frá árinu 1990

Mataræði Íslendinga hefur að mörgu leyti gjörbreyst frá árinu 1990 og segja má að sterkustu einkennum íslensks mataræðis frá árum áður séu óðum að hverfa. Ef lítið er á einstök matvæli eða matvælaflokka felast mestu breytingarnar í minni mjólkur-, fisk- og kartöfluneyslu en meiri neyslu gosdrykkja, vatns, grænmetis, ávaxta, brauða, morgunkorns og pasta. Kjötneysla hefur haldur aukist en minna er þó borðað af rauðu kjöti, þ.e. lambakjöti og nautakjöti, en því meira af svínakjöti og kjúklingum.

### Fiskur og kartöflur hjá þeim eldri – pítsa, franskar og gos hjá þeim yngri

Það kemur væntanlega fáum á óvart að mataræði ungs fólks og eldra er að mörgu leyti gjörólíkt. Fiskur, pasta, franskar, gos og pítsa eru dæmi um fæðutegundir sem eru mjög aldurstengdar. Ungt fólk borðar sex sinnum meira af pasta en þeir elstu, tólf sinnum meira af frönskum kartöflum, tuttugu sinnum meira af pítsu og drekkur tíu sinnum meira af gosi. Pítsuneysla ungra stráka vekur sérstaka athygli, því hún er hvorki meira né minna en 120 grömm á dag að meðaltali, sem jafngildir stórrí sneið á degi hverjum. Pítsan hefur greinilega leyst fiskinn af hólmi sem þjóðarréttur ungra Íslendinga, en ungt fólk borðar þrisvar sinnum minna af fiski en þeir elstu. Fiskneysla ungra stúlkna er þannig hverfandi lítil, eða einungis 15 grömm á dag að jafnaði, sem er varla munnbiti, og 23% ungra kvenna borða fisk sjaldnar en einu sinni í viku. Til samanburðar er kjötneysla ungra stúlkna 77 grömm á dag sem jafngildir kjötmálíði annan hvern dag. Neyslan er auðvitað mismikil og 5% ungra kvenna segjast aldrei borða kjöt.



↓ 30%



JUNE 23, 2014

# TIME

## Eat Butter.

Scientists labeled fat the enemy. Why they were wrong

BY BRYAN WALSH



time.com

## HARVARD PUBLIC HEALTH

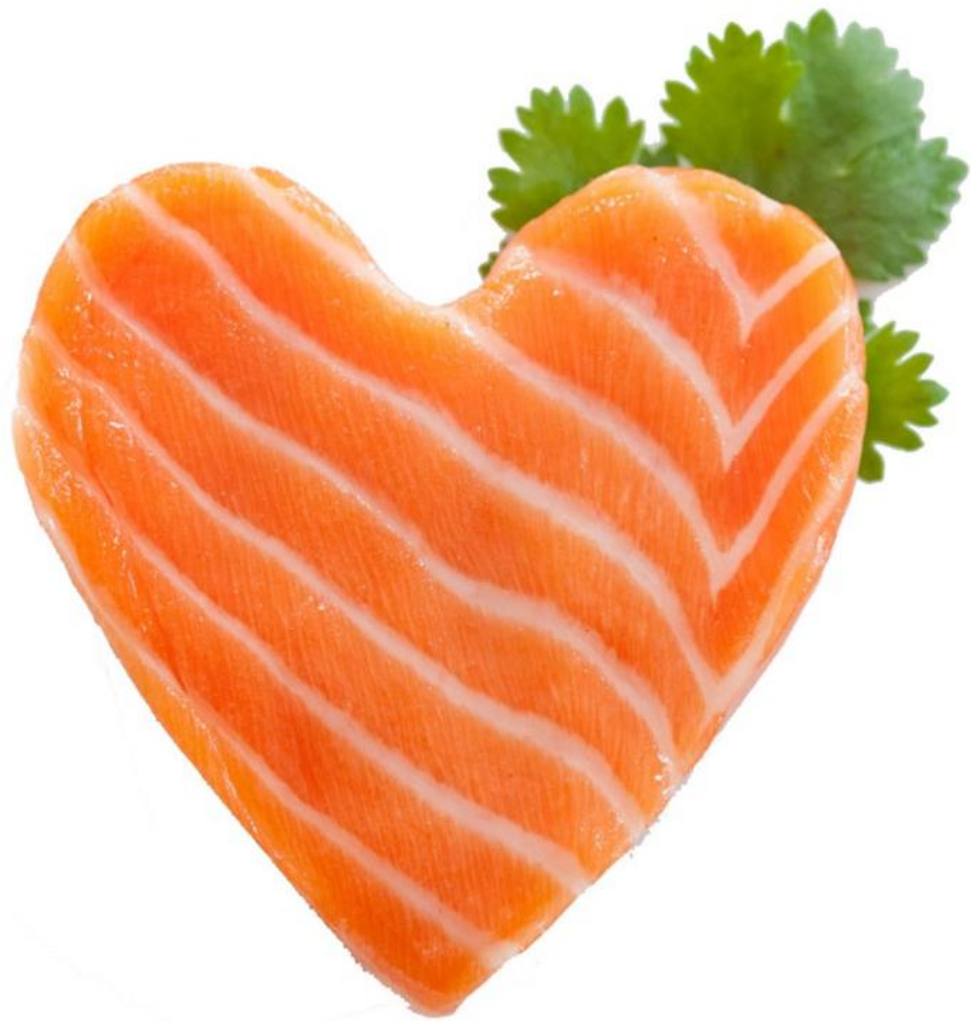
MAGAZINE OF THE HARVARD T.H. CHAN SCHOOL OF PUBLIC HEALTH



## Is Butter Really Back?

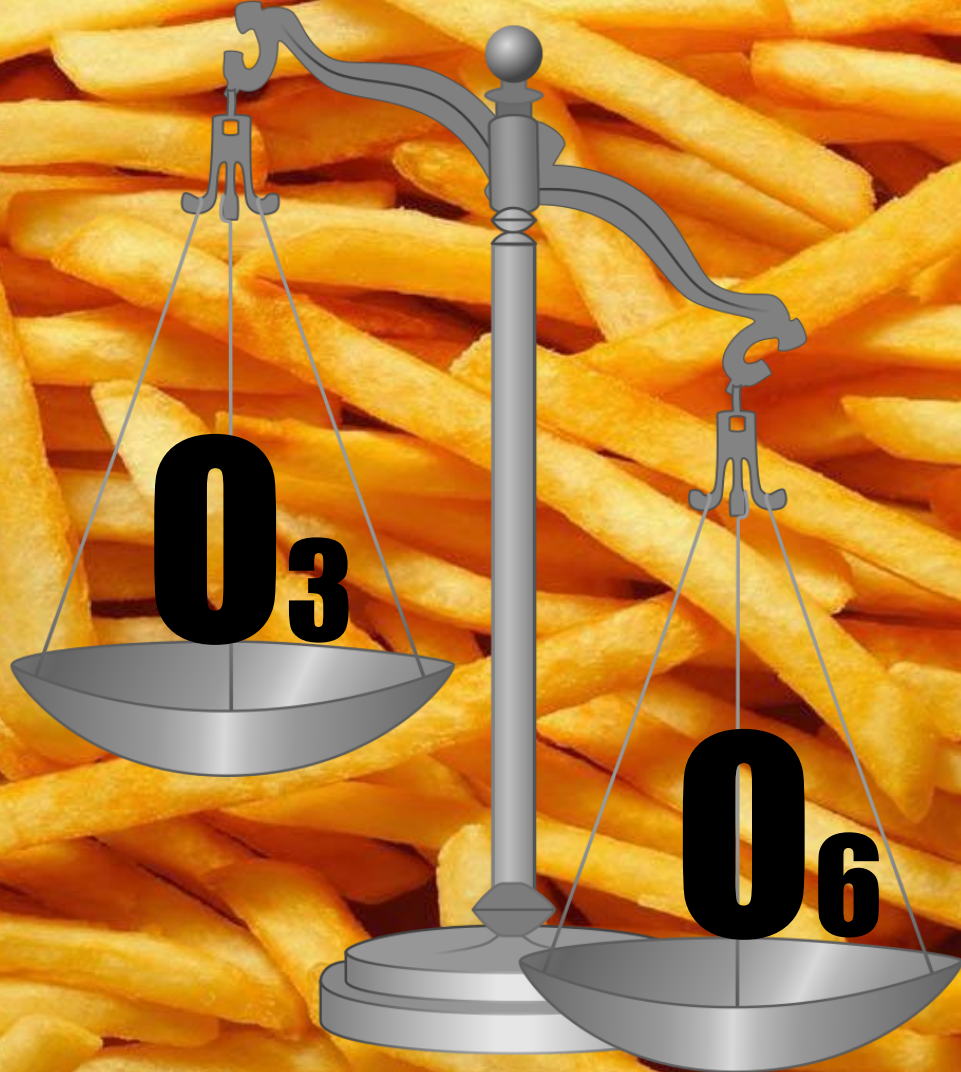
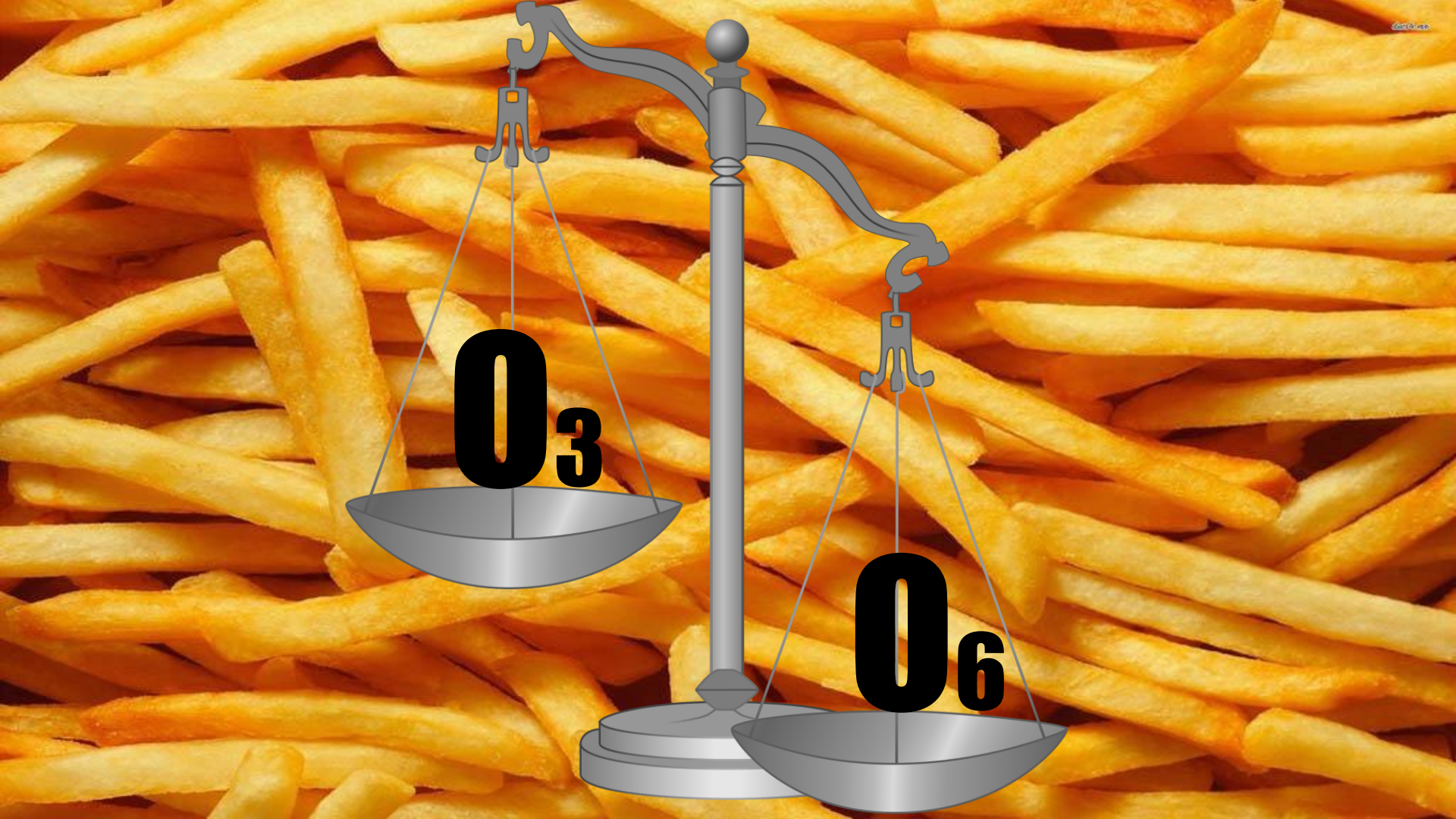
Clarifying the Facts on Fat













# High Fat Mediterranean Diet

- Vegetables, extra virgin olive oil, nuts, **oily fish**
- Moderate intake of cheese & yoghurt
- Low in sugar & refined carbohydrates

- Regular physical activity (walking 22 minutes/day)
- Stress reduction (eg. meditation, Yoga)
- Smoking cessation

Coronary Artery Plaque

© Vicki Carls

Hypertension

**Suboptimal omega 3**  
Too much omega 6

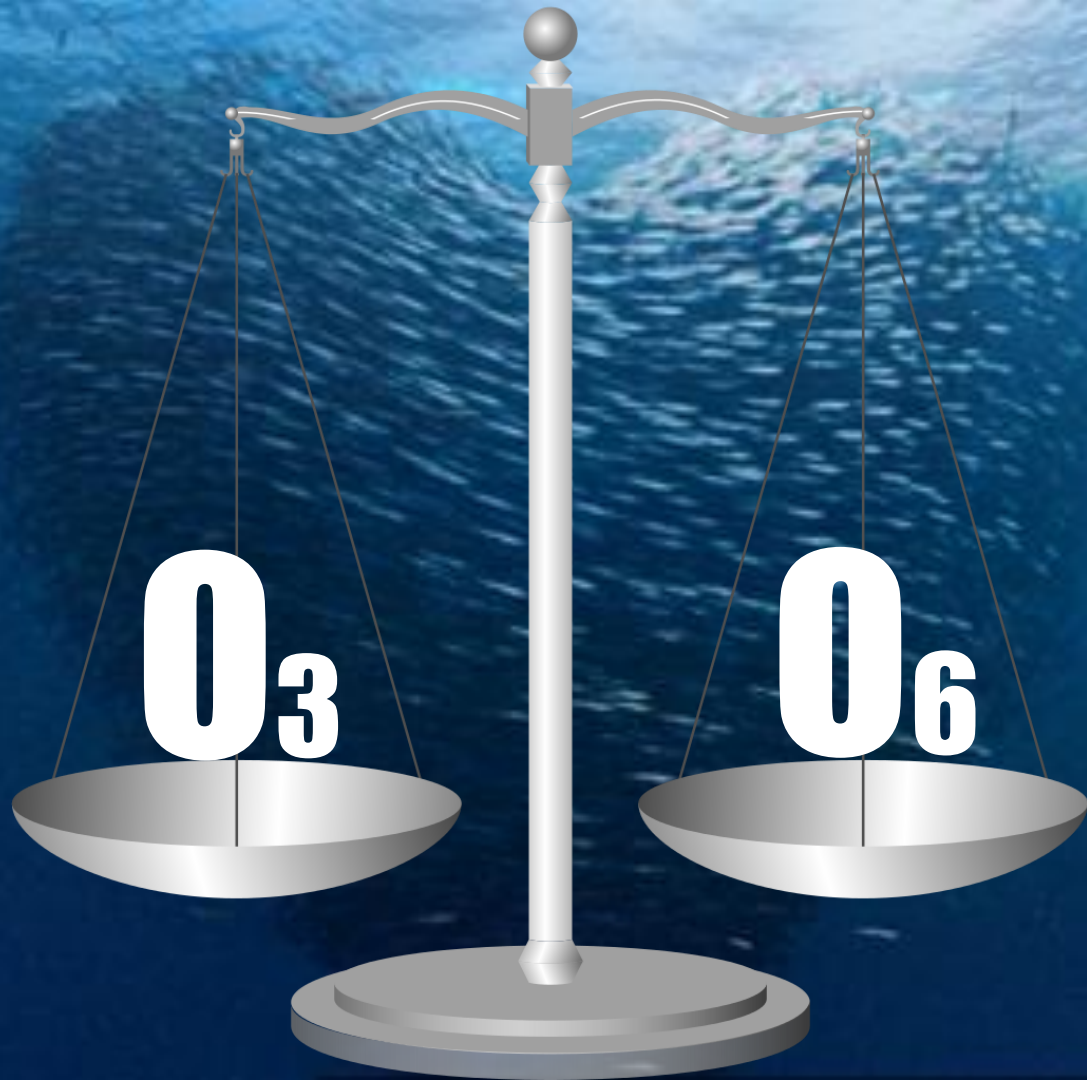
Insulin Resistance  
and/or  
Systemic Inflammation

Type 2 diabetes

Excess fructose +  
refined carbohydrates

Other  
Factors

Atherogenic  
Dyslipidaemia



# Research **Institute**

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and the world's foremost experts



Fat: The New  
Health Paradigm





*The Real Food Pyramid*

# The new paradigm: Fat on the rise

Based on our research, recent medical papers, the trends we analyzed in consumer demand and key data from the "OECD-FAO Agricultural Outlook 2015-2025," we have developed global and regional scenarios on the likely evolution of the consumption of fat, carbohydrates and protein. Here are our main forecasts:

- The drive towards increased fat consumption witnessed over the last fifty years will accelerate due to the combination of higher per capita wealth in developing countries and the gradual acceptance in the developed world that fat is at least not bad, if not actually healthy. Fat consumption per capita is set to grow from the 26% of total energy intake registered globally in 2011 (based on FAOSTAT data) to close to 31% by 2030, with the U.S. going from the current 40% to 47%. We believe that in the case of the U.S., the FAOSTAT numbers are too high to start with as we discussed before; based on the more reliable NHANES data, we believe fat consumption in the U.S. will expand from the current 33% to 38%.
- Carbohydrates will decline from 60% of global energy intake in 2011 to 55% by 2030. Some will think that this is an aggressive forecast, as it took fifty years for carbohydrates to decline from 67% in 1961 to 60% in 2011. But we believe that the rising awareness of the link between excess carbohydrate consumption (and particularly sugar) and type 2 diabetes, cardiovascular issues and mental illnesses will most likely accelerate the historical trend. For the U.S., we believe carbohydrates will decline from the current 51% of total caloric intake (based on NHANES) to 45%; for Europe we are likely to see a decline from 52% to 46%. Similar percentages apply to the rest of the developed world. If anything, we believe the decline of the percentage of energy we source from carbohydrates in the developed world could be sharper.
- Protein will grow just a little from 11% of daily energy intake globally to 12% by 2030 and should remain stable in the developed world and in the U.S. at 15-17%.
- Within fat, saturated fat is likely to experience the fastest growth, going from 9.4% in 2011 to 12.7% of daily energy intake by 2030, mono-unsaturated from 10.2% to 12.2%. We expect polyunsaturated omega-6 to decline slightly from 6% to 5.4% and omega-3 to grow from 0.50% to 0.55% (excluding supplements).
- Finally, we believe that calorie intake in the developed world—1.3 billion people or almost 20% of the total population—will decline from the current levels of 3,340 calories per day (using the FAO database) to 3,180; emerging markets instead—5.5 billion people or 80% of the total—will continue to catch up from the current 2,760 and get to 3,060 by 2030. We assume that 90% of these additional calories will come from the increase in fat consumption; saturated fat alone should account for two thirds of the increase in calorie intake.

The bottom line of these assumptions is that fat consumption per capita is likely to soar by 23% from now until 2030, protein by 12%, and carbohydrates will likely decline by 2%. This implies annual compound growth of 1.3% for fat consumption, compared to 0.9% over the last fifty years. Total demand for fat will be much higher—43% up for fat or 1.9% a year—given the 16% growth in the global population expected over the next fifteen years.

	2011	2016	2021	2026	2030
<b>East Asia &amp; Pacific</b>	<b>28</b>	<b>30</b>	<b>32</b>	<b>35</b>	<b>36</b>
Eastern Asia	28	30	32	34	36
Japan	29	29	29	29	29
Eastern Asia ex-Japan	27	30	32	35	37
Oceania	40	41	42	43	43
Australia	42	43	44	44	45
Oceania ex-Australia	34	35	36	37	37
<b>Europe &amp; Central Asia</b>	<b>34</b>	<b>35</b>	<b>37</b>	<b>39</b>	<b>40</b>
<b>Latin America &amp; Caribbean</b>	<b>28</b>	<b>31</b>	<b>33</b>	<b>36</b>	<b>38</b>
<b>North America</b>	<b>40</b>	<b>42</b>	<b>44</b>	<b>46</b>	<b>47</b>
<b>Middle East &amp; North Africa</b>	<b>23</b>	<b>26</b>	<b>28</b>	<b>31</b>	<b>33</b>
<b>South Asia</b>	<b>20</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>
Southern Asia	19	20	21	22	23
India	19	20	21	21	22
Southern Asia ex-India	20	21	23	24	26
South-Eastern Asia	20	21	22	22	23
<b>Sub-Saharan Africa</b>	<b>19</b>	<b>20</b>	<b>22</b>	<b>23</b>	<b>24</b>
<b>World</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>30</b>	<b>31</b>

## Regional estimates of the percentage of total fat per capita

Source: FAOSTAT, Credit Suisse estimates









# Heimildir

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<http://www.thelancet.com/gbd>

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