Top diet, lifestyle, and fitness trends in 2018: what is the science behind them?

Disclaimer

- I am an optometrist not an RD or a Personal Trainer
- I have no personal conflicts of interest to report

Starting Point – What your patients are probably reading

Basis for ranking by experts

- how easy it is to follow
- ability to produce short-term and long-term weight loss
- nutritional completeness
- safety
- potential for preventing and managing diabetes and heart disease.

And the experts said

Best Overall
- #1: DASH
- #2: Mediterranean
- #3: MIND

Best for Diabetes
- #1 DASH
- #2 Mediterranean
- #3 Vegan

Best Heart Healthy
- #1: DASH
- #2: Ornish
- #3: TLC
On-line broad source of information: Healthline.com

Mediterranean Diet Principles
- Low rates of CAD in Med regions
- Hydrogenated trans fat almost non-existent
- “Can avoid 80% of coronary heart disease, 70% of stroke, and 90% of type 2 diabetes”

- Fruit & Veg
- Whole grains
- Fish
- Limit sugar, refined carbs
- Healthy PUF n-6

DASH DIET
- Rich in fruits, vegetables, whole grains and low fat dairy
- Lean meat allowed
- Reduced sodium, red meat, sweets, processed food
- Over 2 dozen peer reviewed publications

Lower risk of CHD and stroke middle-aged women
- Lower risk of colon cancer, breast cancer, diabetes, and heart failure

But a low glycemic index is not always the key
- JAMA, 2014 Dec 17; 312(23): 2531-2541 Effects of High vs Low Glycemic Index of Dietary Carbohydrate on Cardiovascular Disease Risk Factors and Insulin Sensitivity
- The OmniCarb Randomized Clinical Trial
- Frank M. Sacks, MD
- Using glycemic index to select specific foods may not improve cardiovascular risk factors or insulin resistance in overweight high risk adults

What are all those other popular lifestyle trends?

Et“Only eat clean…”
Plant-Based Living

Animal Protein – Case Against

- Stimulates IGF-1 (insulin growth factor) -
  - Causes cancer to grow
- Cooking meat can generate carcinogens – Heterocyclic Amines

What about protein?

Reality: only need between 46-56 g a day

Paleolithic

- Principles
  - Eat like our ancestors – pre-farming era
  - No grains
  - No dairy
  - No nuts
  - No legumes
  - No corn
  - No refined vegetable oils or sugar
  - No processed food (olives included)

What is on the Paleo lifestyle plan?

- Fruits, vegetables and seeds – berries!
- Protein – nuts, grass-fed lean meat, fish, eggs
- Starches – sweet potatoes, yams, squash
- Recommended Fats – ghee (clarified butter), olive oil, coconut oil, avocado, sesame and nut oils
Many of the authors have something in common: autoimmune disease.

Some of the published science

Long-term effects of a Palaeolithic-type diet in obese postmenopausal women: a 2-year randomized trial
C Mellberg, et. al
- Paleo (PD) vs. low fat high fiber diets
- After two years fat mass, abdominal obesity, and triglyceride significantly better with PD.
- Drawback of study - did not include a control group.

What Dr. Pelino already told you

Diabetes Metab Syndr Obes. 2012; 5: 175–189.
Published online 2012 Jul 6. doi: 10.2147/DMSO.S33473
PMCID: PMC3402009
Comparison with ancestral diets suggests dense acellular carbohydrates promote an inflammatory microbiota, and may be the primary dietary cause of leptin resistance and obesity
Ian Spreadbury

Whole 30

- Similar to Paleo but...
  - No sugar of any type
  - No alcohol
  - You can eat potatoes!
  - Goal is to kick-off a healthier dietary pattern with a 30-day challenge

Top Trend 2017-2018

- Anti-inflammatory foods and lifestyles
  - AI protocol
    - Whole 30 plus no nightshades (potatoes, tomatoes, eggplant)
    - No eggs or nuts
  - Turmeric, cinnamon, ginger, green tea
  - Peppers? Tomatoes? Aren’t those nightshades? ITS CONFUSING!!

On the Good List

- Fruit
- Saffron
- Turmeric
- Green Tea
- Coffee ☕
- Lentils
- Hibiscus Tea
- Mushrooms
- Fiber
Science

The Fat Debate
- Is it good or bad?
- Butter, coconut oil, olive oil, margarine?
- 20-35% Total
- Saturated < 10%
- Canadians say and conclusion: “not include a threshold or limit for saturated fat and instead focus on a healthy balanced dietary pattern”

Coconut Oil Craze
- “There are a lot of claims that coconut oil may have health benefits, but there is no concrete scientific data yet to support this,” said Dr. Daniel Hwang, a research molecular biologist specializing in lauric acid at the Western Human Nutrition Research Center at the University of California, Davis.

Is there anything in common with all of this?
- Moderation
- Avoid processed food
- Avoid refined sugar
- Fresh fruits and vegetables
- Whole grains and whole foods
- Beans and lentils
- Low sodium
- Lean meats
- Elimination trial and reintroduce

Exercise – what is the best?
- Aka, how long do I really have to do cardio?
- Strength training
- Stretching and flexibility
- The exotics

Aerobic Exercise - Cardio
- AHA recommends 150 minutes a week
- Cardiovascular health
- Endurance capacity
- Faster weight loss on its own but – lose muscle in addition to fat

Age | Lower HR Zone (60%-90%) | Average Maximum Heart Rate
--- | --- | ---
20 years | 110-172 beats per minute | 200 beats per minute
30 years | 110-172 beats per minute | 195 beats per minute
40 years | 110-172 beats per minute | 190 beats per minute
50 years | 110-172 beats per minute | 185 beats per minute
60 years | 110-172 beats per minute | 180 beats per minute
70 years | 110-172 beats per minute | 175 beats per minute
80 years | 110-172 beats per minute | 170 beats per minute
90 years | 110-172 beats per minute | 165 beats per minute
100 years | 110-172 beats per minute | 160 beats per minute
**Strength Training**

- Low resistance weights, bands, body weight – recommended 2 times a week and work all muscle groups
- Heavier weights – can increase heart rate and improve cardiovascular output
- More muscles = longer duration of fat burning during rest

**HIIT**

- High intensity interval training
- Premise – short bursts of high intensity followed by lower heart rate in 20 minute rotations improves metabolism

**We have to talk about...**

- **Crossfit**
  - Constantly varied function movements at high intensity
  - Combo of strength and interval training
  - Community is a key

**Flexibility Enhancing**

- Yoga – flexibility
- Pilates – stabilizes and strengthens core
- PIYO – combines both

**What type of exercise should we do?**

- Combination of all throughout the week

- Mahalo!
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