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Healthy Weight, Healthy Heart

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Welcome to Issue 15 of Science Says! Our weekly newsletter where you'll learn the latest healthy aging and C15:0 research news that our team of doctors, scientists, and experts are most excited about—without having to go search for it.

Eric and Steph
Co-Founders, Doctors, Nerds

What Dr. Eric Venn-Watson, our co-founder and Navy physician, is reading.

HEALTHY AGING

Wait - What Exactly is a Healthy Weight?

The American Heart Association recently published eight updated and enhanced health tips, called Life's Essential 8, in the journal, *Circulation*. We are dedicating our latest round of newsletters to Life's Essential 8.

What we all watch

Instead of defining whether or not you have heart disease, Life's Essential 8 is used to define whether or not you have heart *health*. Meeting all of these essential 8 goals is expected to help us not only have healthier hearts, they can enable us to live longer, healthier lives.

This week, let's talk about what we all watch:

- [x] Healthy weight

So, am I a healthy weight?

The National Heart, Lung, and Blood Institute created four categories to define a healthy body mass index (or BMI), which is a measure of body fat based on your height and weight.

Step 1. Click here to calculate your BMI using the National Heart, Lung, and Blood Institute calculator.

Step 2. Now, match your BMI to one of the following four groups.

- [ ] < 18.5 = Underweight
- [ ] 18.5-24.9 = Normal weight
- [ ] 25-29.9 = Overweight
- [ ] 30 or Greater = Obesity

If you have a BMI of 25 or greater, the National Institutes of Health has a great site called "Aim for a Healthy Weight". Here, you can get tips on how to maintain a healthy weight, increase physical activity, eat a healthy diet, and control your heart health numbers.

Beyond the scale - the role of the metabaging cycle

As we get older, we can develop an unhealthy weight without gaining or losing a pound. How so, you ask?

Well, aging often comes with increased fat mass and decreased muscle mass. This unhealthy balance of more fat and less muscle is caused by a process that Li et al. call the "metabaging" cycle.

As part of the metabaging cycle:

- Fat is disproportionately distributed to the intra-abdominal area (called visceral fat).
- Fat also infiltrates muscles.
- These pro-inflammatory fats impair mitochondrial function, slow beta-oxidation of fatty acids, increase reactive oxygen species, and increase lipotoxicity to muscle cells.
- This inflammatory state causes muscle cells to wither and fat to be further distributed to the intra-abdominal area and the muscles.
- Over time, this cycle results in a condition called sarcopenic obesity.

How do we avoid sarcopenic obesity as we age?

How to avoid sarcopenic obesity as we age? You guessed it: exercise and a healthy diet can go a long way in keeping our muscle mass up and the bad fat down. Check out Science Says! Newsletter Issues 13 and 14 for more on healthy diets and exercise.

Stay tuned for next week's newsletter, and the last of our Healthy Heart series, on the latest scientific studies around healthy levels of blood lipids, blood glucose, and blood pressure.

C15:0 for healthy-aging weight*

The pure C15:0 ingredient in fatty15 has been shown in peer-reviewed studies to help reverse cellular aging, including all those components of the metabaging cycle. This includes fatty15's demonstrated ability to:

- [x] Lower multiple pro-inflammatory cytokines
- [x] Repair mitochondrial function
- [x] Improve beta-oxidation of fatty acids
- [x] Lower reactive oxygen species
- [x] Lower lipotoxicity to cells

Given this, consider fatty15 as your anti-metabager.

Dive deeper into the science

READ THESE STUDIES

- Life's Essential 8: Updated tips from the American Heart Association
- BMI calculator
- NIH's Aim for a Healthy Weight site
- The metabaging cycle (Li et al.)
- The obesity paradox with older age
- C15:0 lowers pro-inflammatory cytokines and lipotoxicity
- C15:0 repairs mitochondrial function, lowers ROS, and improves beta-oxidation of fatty acids