

The background features a vibrant, abstract design with numerous colorful splatters and dots in shades of green, yellow, pink, purple, and blue. A large, white, semi-transparent circular graphic is positioned on the left side, partially overlapping the text.

The Science of Your Life

Lifetime Learning Institute Fall 2024

Dr. Gillian S. Backus, NVCC

Your incredible body

Let's go through the slides

Let's discuss what you know about each system of the body

Let's discuss what you would like to know

I'll research and get back to you on what I can't answer for next time.



Some ideas:

Do you want to see what the cells look like (histology?)

Do you want to know how something works?

Do you want to know about a certain disorder or condition?

Do you want to know what happens in that particular system as you age?

Do you want to know something about environmental effects on that system?



✓ How do we get an infection?

Dry skin vs. other (only) skin?

✓ What are some things that predispose to skin cancer other than exposure?

✓ Why does your skin get thinner as you age?

✓ Scarring healing?

✓ How often does skin refresh?

✓ healing ability

✓ Pigmentation? what's that about?

Distribution of hair

✓ Diet/exercise helps skin how?
Wrinkling? why?

Integument (skin)

[UMichigan interactive](#)

Itching
Supplements?
Podcast?
age spots

Limit sun exposure + STILL
✓ get cancer? why?

Skeletal System

✓ hip replacement

can you build bone from exercise?

✓ bone marrow

why we shrink?

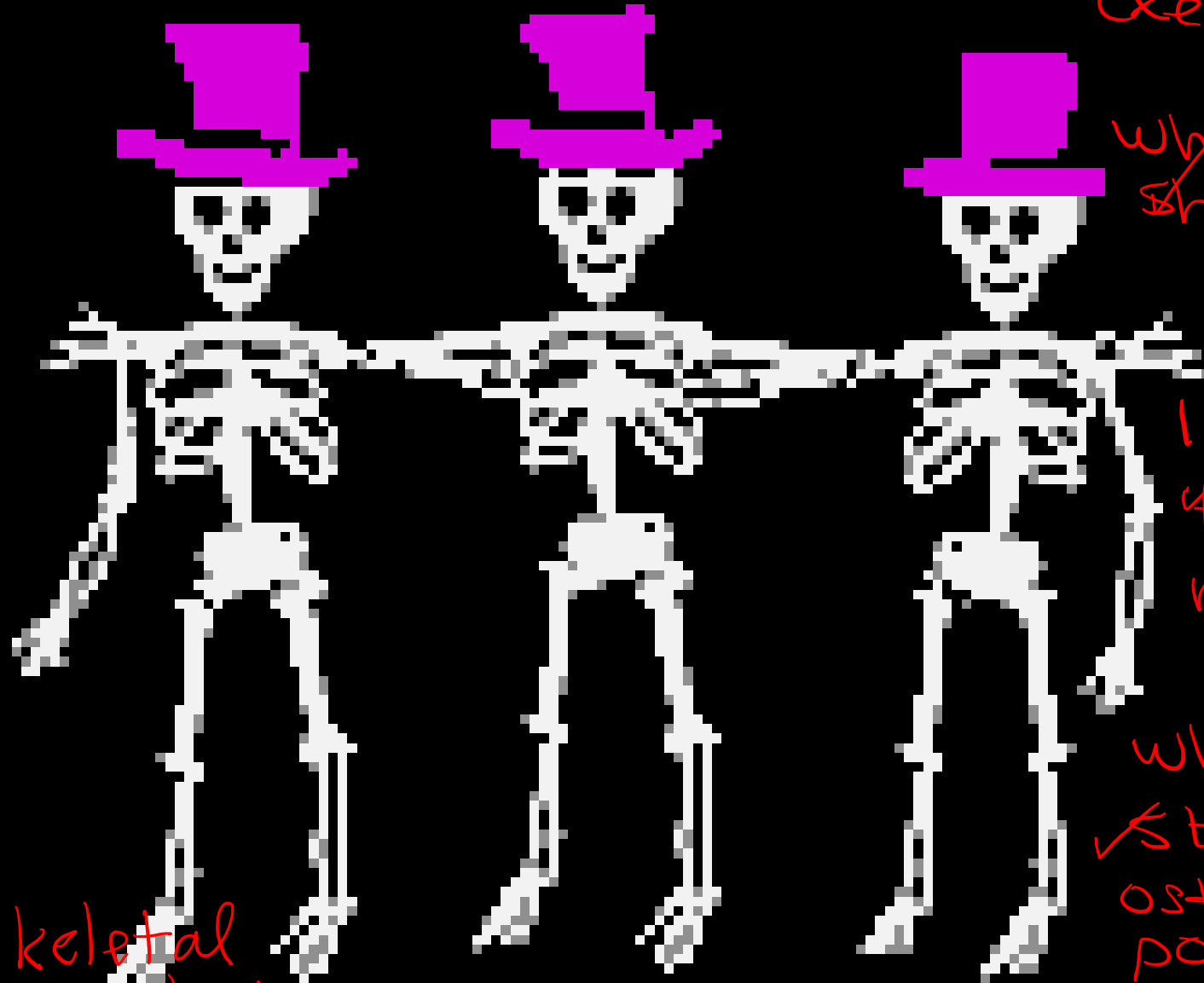
↓
circ. system?

✓ do all bones have marrow?

ligaments/
tendons/
nerves

✓ arthritis affects on skeletal system

what starts osteoporosis?





Muscular System

When should you take dementia tests?

What is a headache?

gut-brain?
which one
is in
control?

Your Brain

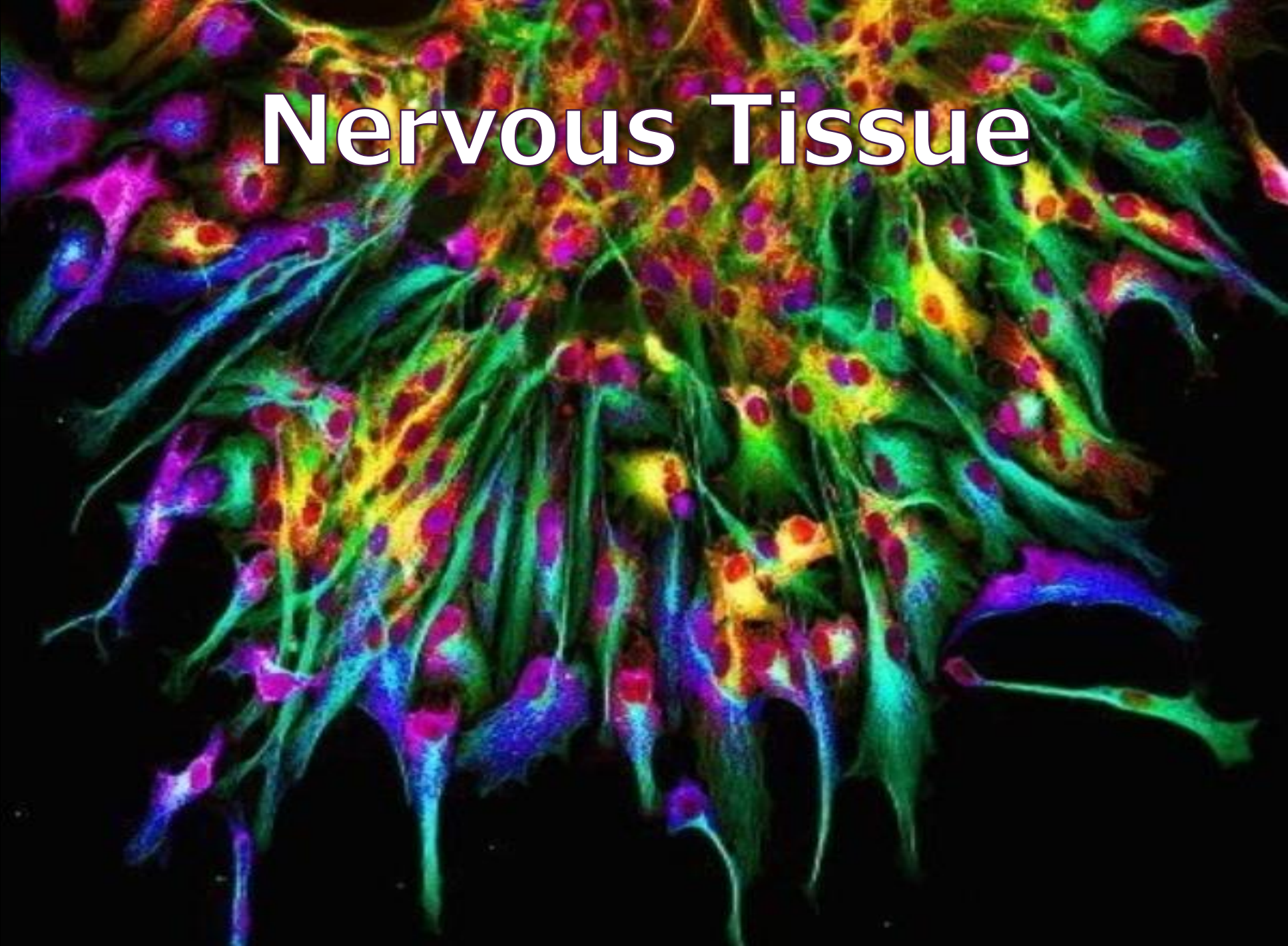
types of learners
Learning-memory

Memory - why so difficult?

✓ work around damaged areas?
✓ strokes / injuries / concussions

! Q: why do some
people "access more
of the brain"?

Nervous Tissue





Eyes and Vision

Hearing

How you hear?

Hearing as you age?

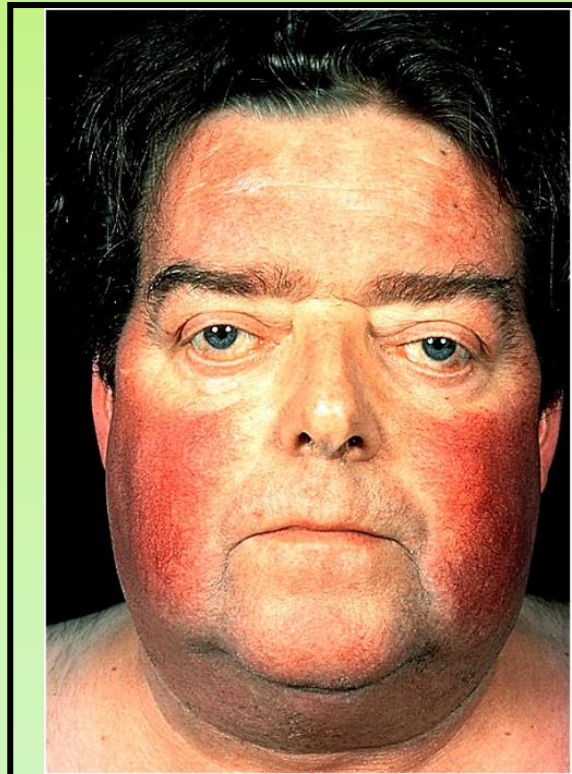
Balance?



Endocrine System

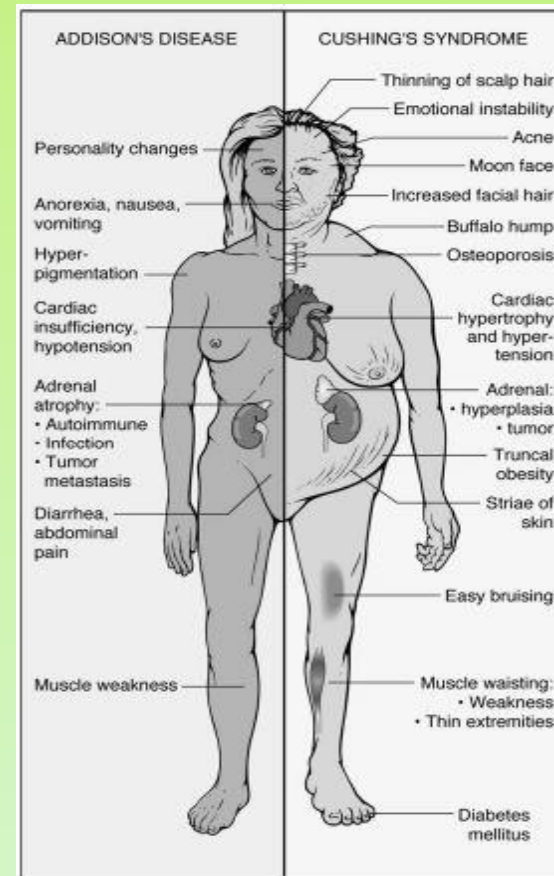
Overproduction of ACTH (pituitary) and aldosterone (Adrenal)

Underproduction of cortisol and aldosterone (Adrenal)



(e) Cushing's syndrome (excess glucocorticoids)

Figure 18.22e Tortora - PAP 12/e
Copyright © John Wiley and Sons, Inc. All rights reserved.



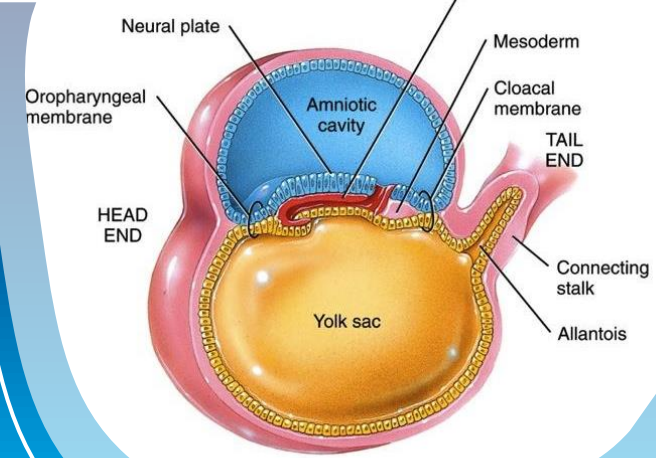
(Addison's disease)

A scanning electron micrograph (SEM) showing several nematodes on a green, textured surface. The nematodes are elongated, cylindrical organisms with a distinct head region and a tail region. They are arranged in a somewhat circular pattern, with some showing their characteristic coiled posture. The background is a dense, granular green material.

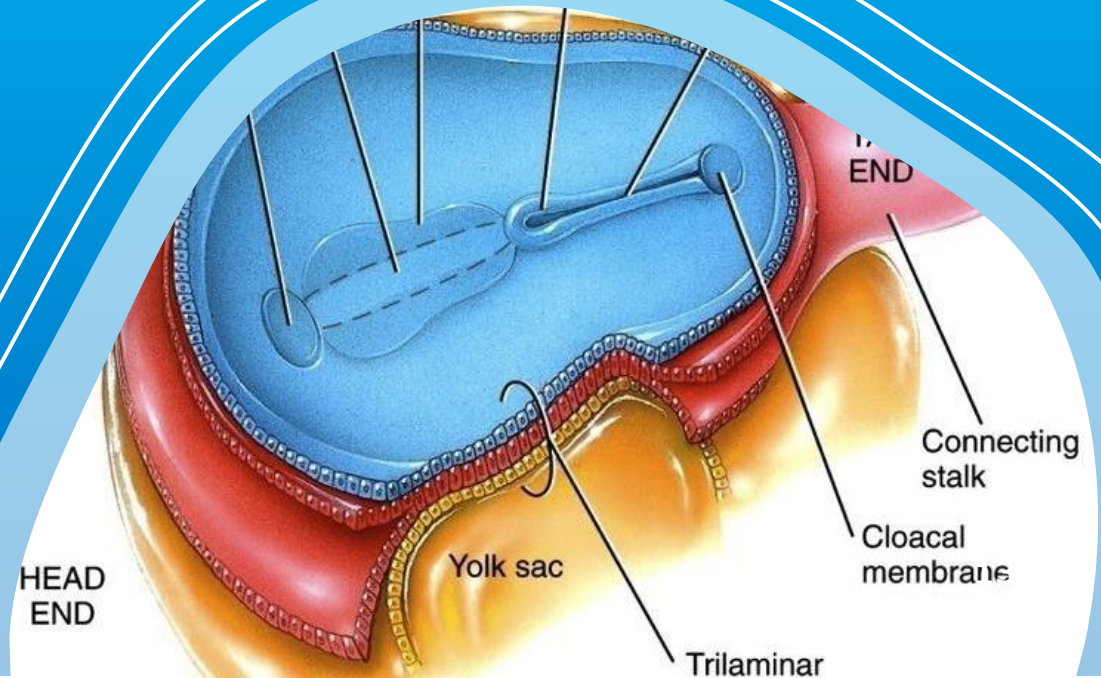
Reproduction

It takes two....

DEVELOPMENT



Coronal section of trilaminar embryo
14 days after fertilization




A photograph of a man from the chest up, wearing a light blue t-shirt. He is holding a large, solid red heart against his chest with his right hand. The background is a blurred outdoor setting with green trees and foliage, suggesting a park or garden. The lighting is bright and natural. The text 'Your Heart' is overlaid in white, sans-serif font across the center of the image, partially overlapping the red heart.

Your Heart

Respiratory System







The Immune System: How your body fights disease

<https://vaccinemakers.org/resources/videos-animations>

NEW YORK TIMES BESTSELLER
Mary Roach

LAURENCE D'ARNO
WITH ILLUSTRATIONS BY NEELF



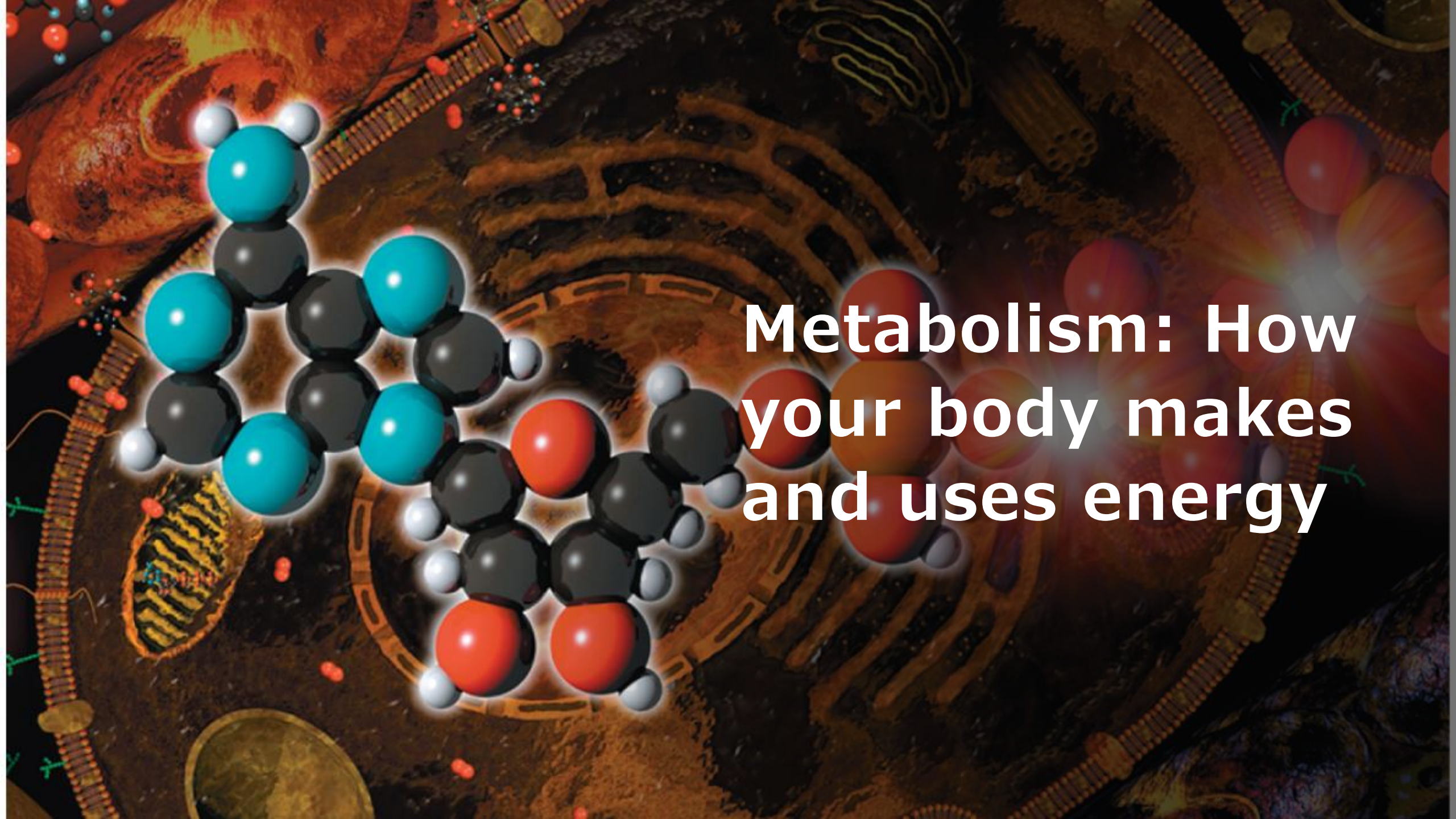
ADVENTURES ON THE ALIMENTARY CANAL

"Her funniest and most quotable passages are...

—JANET HARRIS, NEW YORK TIMES

COMEDY

Digestive System



**Metabolism: How
your body makes
and uses energy**