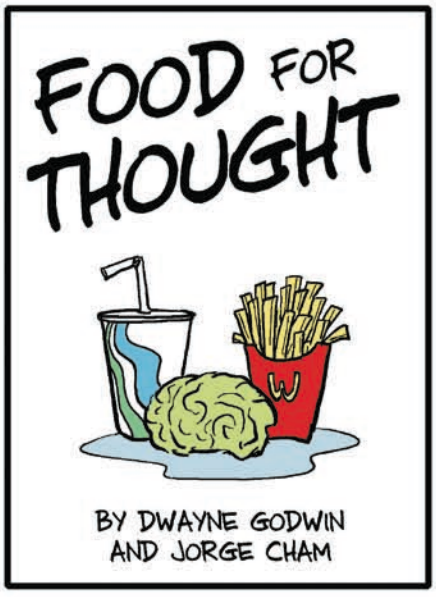
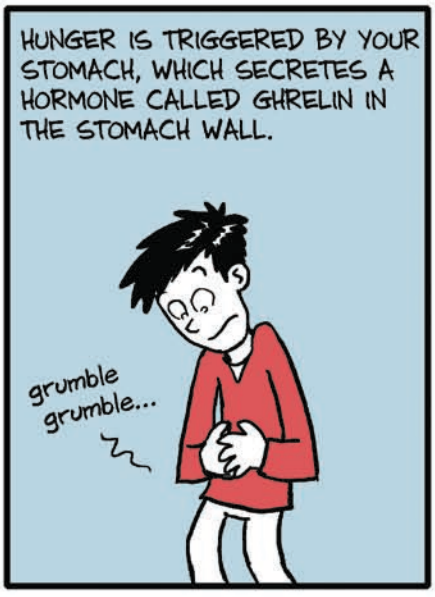
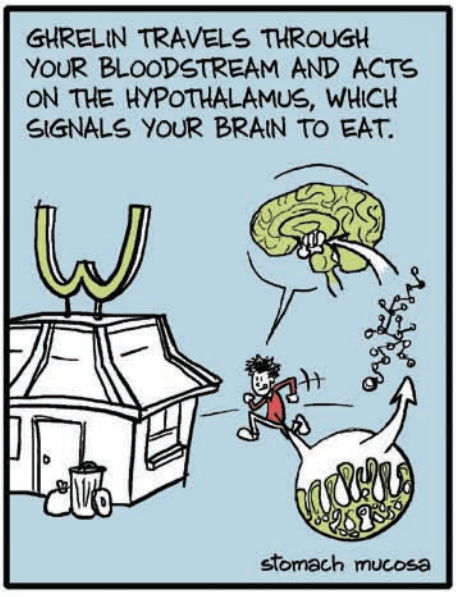
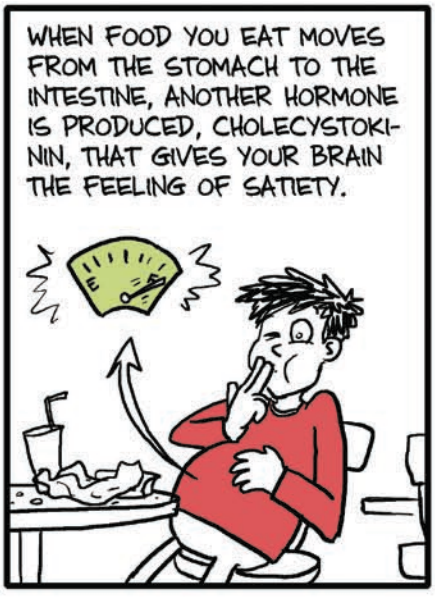

FOOD FOR THOUGHT
BY DWAYNE GODWIN AND JORGE CHAM


HUNGER IS TRIGGERED BY YOUR STOMACH, WHICH SECRETES A HORMONE CALLED GHRELIN IN THE STOMACH WALL.
grumble grumble...

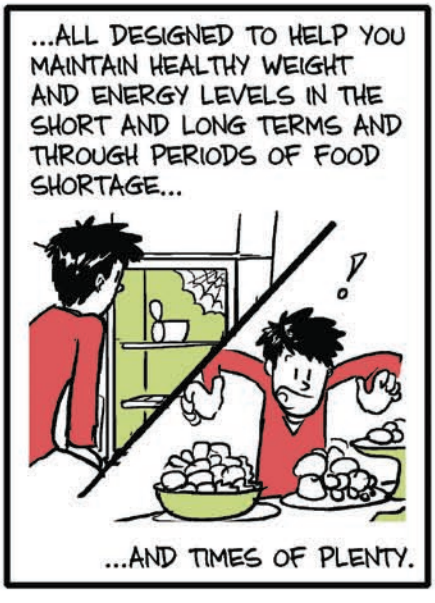

GHRELIN TRAVELS THROUGH YOUR BLOODSTREAM AND ACTS ON THE HYPOTHALAMUS, WHICH SIGNALS YOUR BRAIN TO EAT.
stomach mucosa

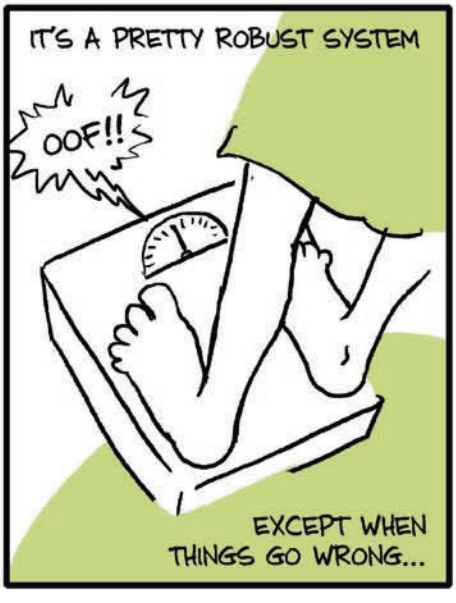
PRODUCTION OF GHRELIN IS TRIGGERED BY BLOOD SUGAR AND FREE FATTY ACID LEVELS, BUT ALSO BY THE ANTICIPATION OF EATING.


WHEN FOOD YOU EAT MOVES FROM THE STOMACH TO THE INTESTINE, ANOTHER HORMONE IS PRODUCED, CHOLECYSTOKININ, THAT GIVES YOUR BRAIN THE FEELING OF SATIETY.

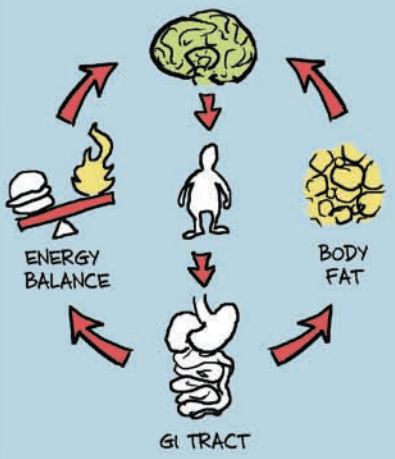
ANOTHER HORMONE THAT TURNS YOU OFF EATING IS LEPTIN, WHICH IS SECRETED BY THE FAT CELLS IN YOUR BODY. THE MORE FAT YOU HAVE, THE MORE THE HORMONE IS MADE.

THUS, YOUR DECISION TO EAT IS INFLUENCED BY MANY SIGNALS IN YOUR BODY...
YOU SKIPPED BREAKFAST!
EAT!
YOU'RE TOO FAT!
TASTES GOOD!
GRUMBLE GRUMBLE


...ALL DESIGNED TO HELP YOU MAINTAIN HEALTHY WEIGHT AND ENERGY LEVELS IN THE SHORT AND LONG TERMS AND THROUGH PERIODS OF FOOD SHORTAGE...
...AND TIMES OF PLENTY.

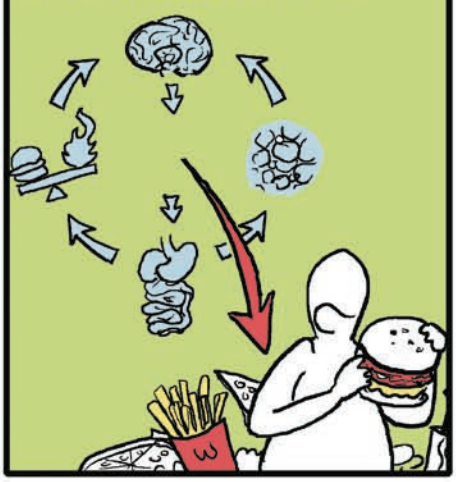

IT'S A PRETTY ROBUST SYSTEM
OOF!!
EXCEPT WHEN THINGS GO WRONG...

SEVERAL THINGS CAN HIJACK THIS REGULATORY SYSTEM.



ANY GENETIC DEFECTS OR DISEASES THAT DISRUPT HOW THESE HORMONES ARE PRODUCED OR RECEIVED WILL CAUSE THE SYSTEM TO MALFUNCTION, LEADING TO ANOREXIA OR OBESITY.

MORE IMPORTANT IS HOW OUR ACTIVE MINDS FIGHT OR ABUSE THIS REGULATORY SYSTEM.



DIETING IS HARD BECAUSE YOU ARE DISRUPTING THE ESTABLISHED LEVELS OF HORMONE SIGNALING.

IT'S ALSO HARD BECAUSE EATING MAKES US FEEL GOOD. IT GIVES US COMFORT, PLEASURE, EVEN RECREATION.

IT'S NO WONDER WE SEEK IT WHEN WE FEEL DOWN, AND SOMETIMES ABUSE IT EVEN IF OUR BODIES DON'T NEED IT.

(THE BRAIN'S FOOD RESPONSE USES SOME OF THE SAME NEURAL CIRCUITS AS DRUG ADDICTION)

AND ADVERTISERS KNOW THIS.

THEY DON'T SELL US THE PRODUCT ITSELF SO MUCH AS THE FEELING THEY WANT US TO ASSOCIATE WITH CONSUMING THE PRODUCT.

FOOD IS AVAILABLE TO US 24/7, DESIGNED TO CATCH OUR EYES AND CATCH US IN A MOMENT OF WEAKNESS.

WITH ALL THE NOISE AND EMOTIONS THAT SURROUND US, IT'S EASY TO MISS OUR OWN BODY'S SIGNALS.