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Ob/Ob — sense of hunger never gets better.

Selective pressure:
- No food → No survival
- Plenty of food → Obesity

Heritability estimates:
- Obesity: 0.80 - 0.90
- Height: 0.90
- Schizophrenia: 0.68
- T2D: 0.60
- Hypertension: 0.57
- Alcoholism: 0.57
- Heart Disease: 0.49

Genetic factors:
- Pacific Islanders: risk of: famine, typhoon, lack of food, evolved to store nutrients in times of plenty → survival

The more obese someone is, the more likely that it is genetic.
FEEDING FOOD

vs.

CONSCIOUS DESIRE

BASIC DRIVE

LIFESTYLE

DOES IT MATTER WHERE YOU GET YOUR CALORIES?

CHOICES

TOXIC LIFESTYLE PREDISPOSES ONE TO OBESITY?

CAN IT BE MODIFIED?

CIRCUIT?

HUNGER/FEEDING CIRCUIT

medication alters circuit.

PITUITARY TUMOR REMOVED, NEURAL CIRCUIT

MASSIVE OBESITY

LEPTIN TO THE RESCUE?

NOT THAT MANY PEOPLE ARE LEPTIN DEFICIENT

BLOOD TEST