

What about the texture?

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Structure

Texture

Mastication

Acceptability

Oral breakdown

**Protect/deliver
functional
ingredients**

Nutrition

Food choices

“All the mechanical, geometrical and surface attributes of a product perceptible by means of mechanical, tactile, visual and auditory receptors”

Structure

Texture

Mastication

Oral breakdown

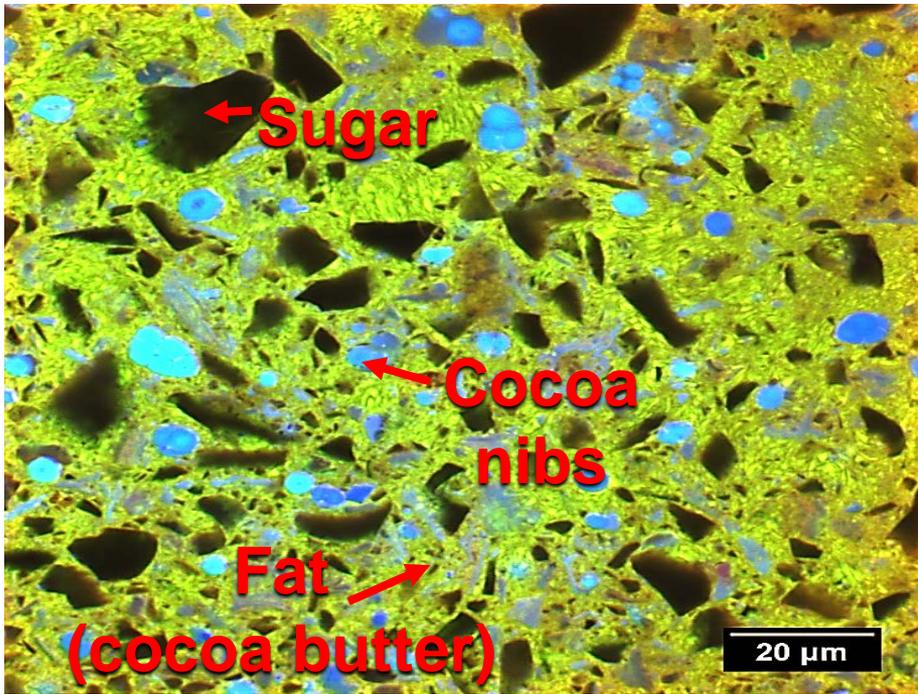
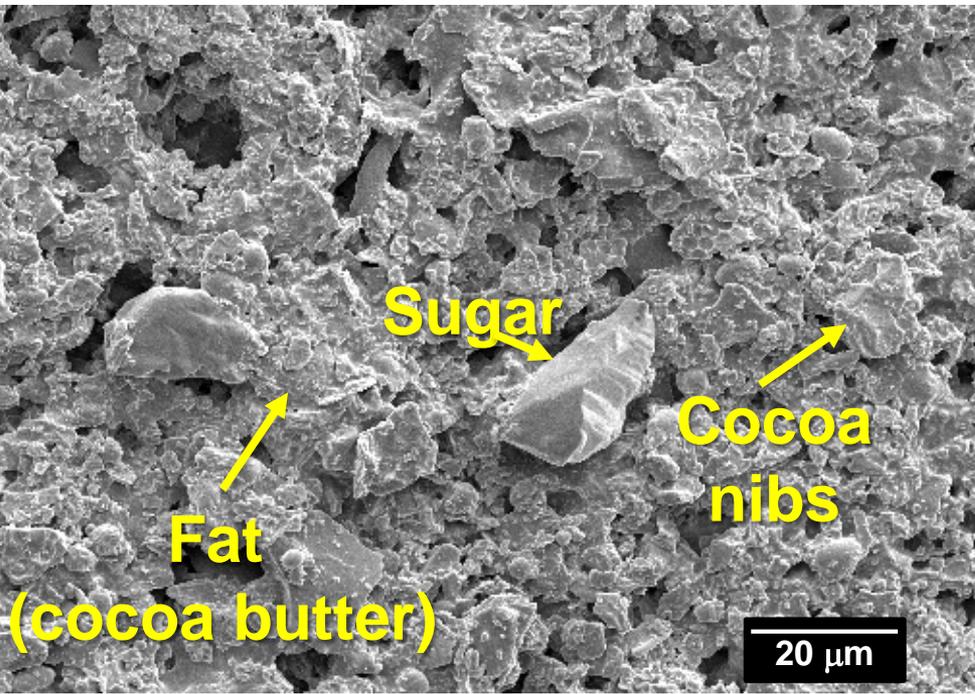
**Protect/deliver
functional
ingredients**

Texture makes taste

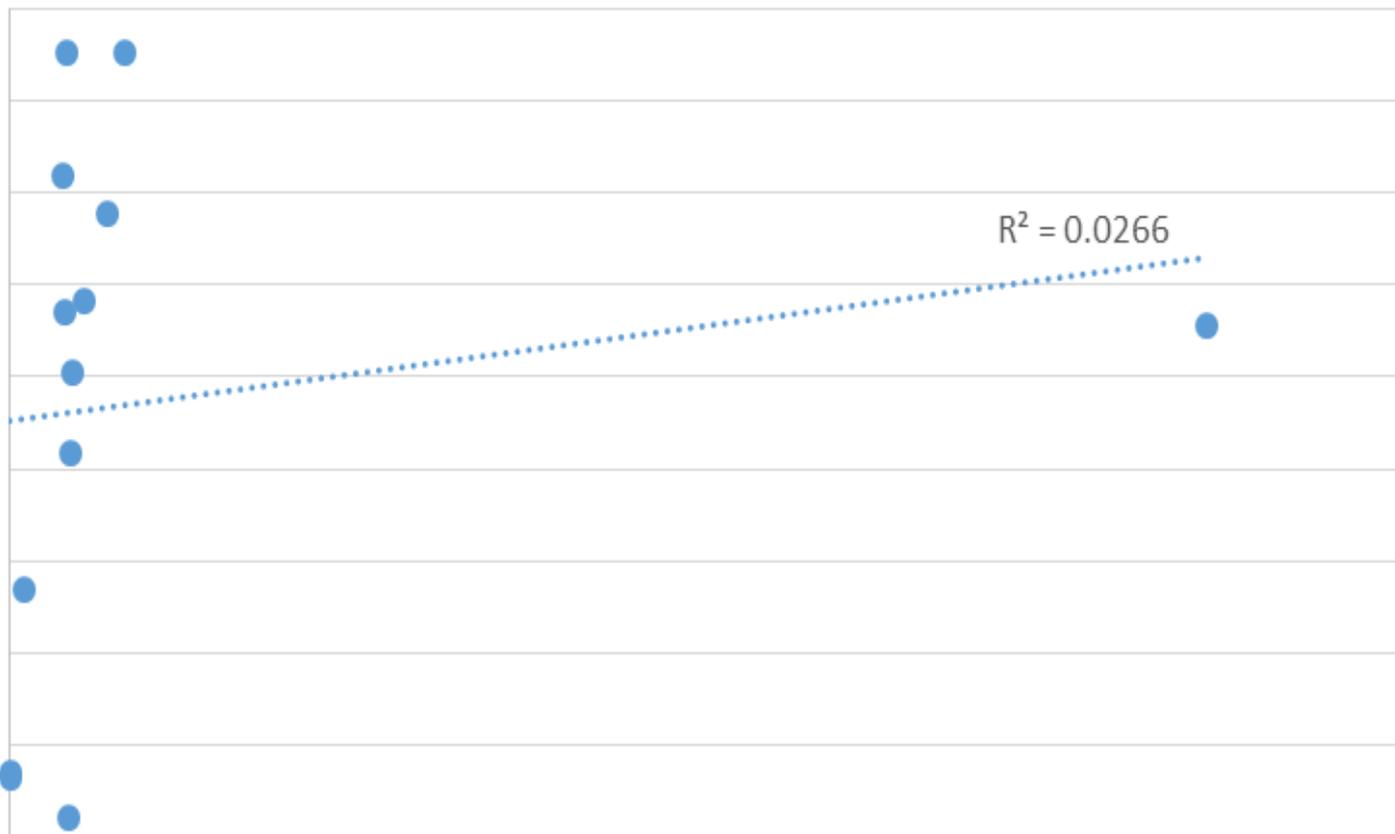
Texture starts before the first bite

We are all highly repeatable chewing machines

Chocolate – Texture



Sensory "Quality"



Stiffness

NATIONAL
SCIENCE
Challenges

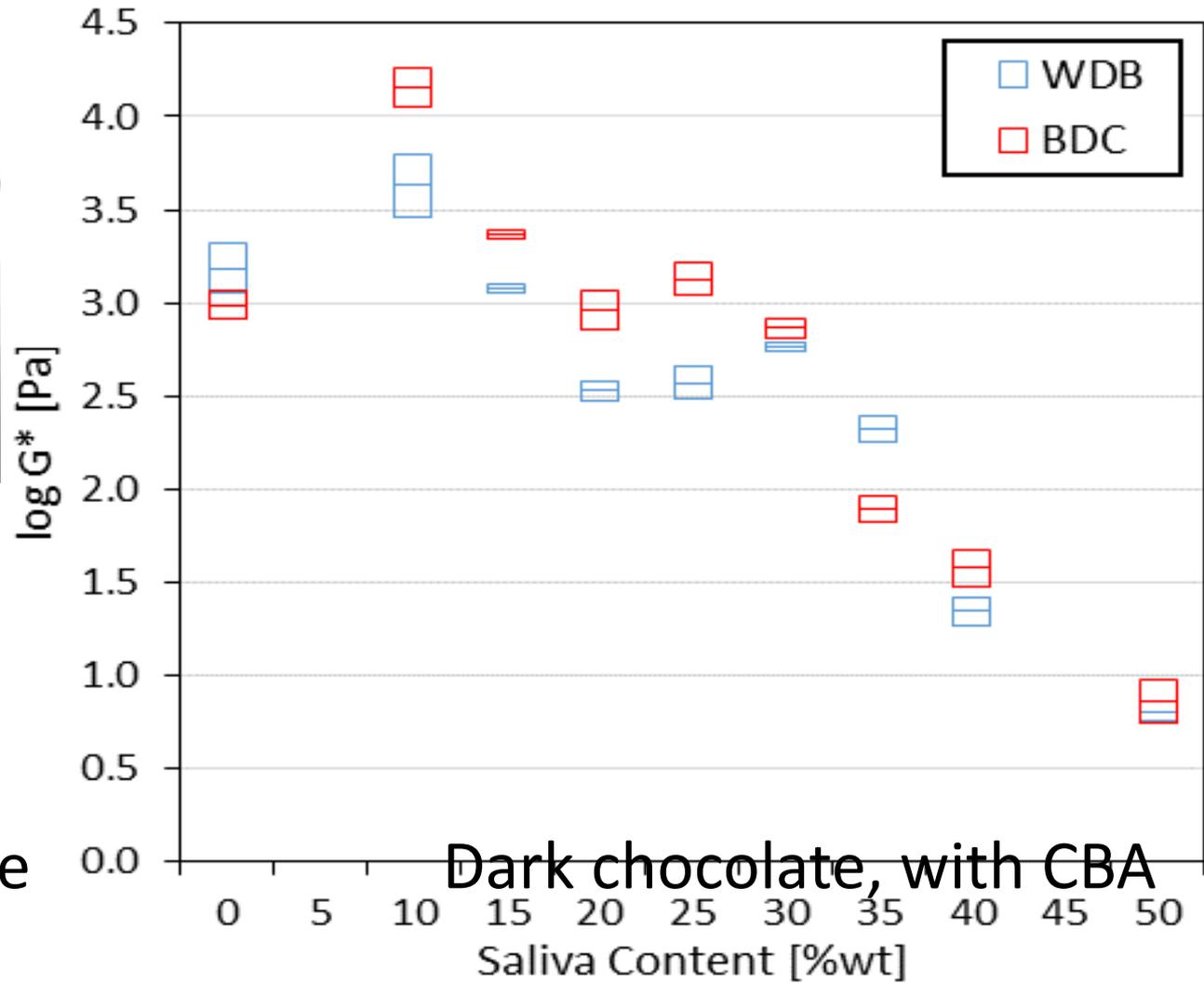
HIGH-VALUE
NUTRITION

Ko Ngā Kai
Whai Painga

Chocolate - Oil



Dark chocolate



CONCLUSIONS

- Food structure needs to be considered when we design food products for specific functions
- Processing → Structure → Properties
- Value added products from designed structures
- Manipulate structure to manipulate texture → manipulate chewing (and functionality)