New Zealand Extracts Ltd – triumphs and challenges

11 lessons from 11 years of taking NZ natural ingredients to the world
Lesson 1: Location, location…
Lesson 2: NZ does have a reputation as a source of quality produce
... location!!
280 000 tonnes

280 million bottles

70 000 tonnes
New Zealand Extracts Limited – incorporated 17th May 2005
Glenn Vile
Health researcher
NZ Seed Oils Ltd
Cold pressed oils including grape seed oil

Garth Neal
Farmer – growing grapes

Neil Charles-Jones
Architect
NZ Wineries Ltd
Contract wine making – grape marc

Ron Stewart
Property developer

NZ Wineries Ltd

new zealand extracts ltd

Oxi-fend®
yinanza®
Digesten®
new zealand extracts ltd
Lesson 3: It's all about the people

- Pioneers
- Risk takers
- Diversity of skills and resources
Lesson 4: Learning what consumers want
Lesson 5: Check the market
Lesson 5: Check the market
Lesson 6: Check the science

Effect of polyphenol-rich grape seed extract on ambulatory blood pressure in subjects with pre- and stage I hypertension.

Red grape seed extract improves lipid profiles and decreases oxidized low-density lipoprotein in patients with mild hyperlipidemia.

The effect of grape-seed extract on 24 h energy intake in humans.

Effect of a novel dietary supplement on skin aging in post-menopausal women.
Lesson 6: Check the science

Conclusion: Grape derived products can deliver “General wellbeing”
Lesson 7: Check the market - pricing

Grape seed extract

US $10-20 / Kilogram (FOB Price)
1 Kilogram (Min. Order)
Place of Origin: CN; Baoji Oasier Bio-Tech Co., Ltd.
Lesson 8: To deliver a commercially successful grape derived ingredient product NZEL would need to add value.
Adding value

Step 1: Development of a unique process

Fruit → Skins & or Seeds → Water Extraction → Water based filtration → Freeze drying → Oxi-Fend® Extract

Our 100% Aqua Pure® extraction process
Development of a unique process - 100% Aqua Pure®
Lesson 9: Building on NZ’s global reputation for being pure and green
Adding value

Step 2: Development of a unique product

Industry standard grape seed extract

NZEL 100% Aqua Pure® grape seed extract
Adding value

Step 3: Branding

Oxi-fend®
Adding value

Step 4: Proof of efficacy

Muscle Damage Following Exercise

- No Addition
- With Oxifend® Grape Seed Extract

HortResearch
Lessons learnt – example 2

Developed markets the hotbed of innovation

HW in Developed Countries 2014, by Prime Positioning

- General Wellbeing: $12,021
- Weight Management: $11,113
- Digestive Health: $4,445
- Energy Boosting: $2,323
- Bone and Joint Health: $1,616
- Endurance: $1,414
- Oral and Respiratory Health: $1,212
- Food Intolerance: $1,414
- Cardiovascular Health: $1,034
- Immune Support: $1,444.5
- Urinary Tract Health: $757.10
- Brain Health and Memory: $560.20
- Beauty From Within: $218.19
- Vision Health: $6.80

Global Off-Trade Sales, US$ billion, fixed exchange rates

© Euromonitor International

Oxi-fend®  yinanza®  Digesten®
Digestive health is largely a function of the ability of the gut to break down ingested food

1. Digestive enzymes – particularly proteases

1. Bacteria
NZ has a reputation as a source of quality produce
Checking the science

Kiwifruit promotes laxation in the elderly

Increasing dietary fiber intake in terms of kiwifruit improves constipation in Chinese patients
Skin – soluble fibre and phenolics

Pulp - actinidin (protease enzyme)

Checking the science
Adding value

Kiwifruit pulp enzyme extract - enhances digestion of proteins

BEEF 30 minutes
Lane 1: Ladder
Lane 2: Protein only
Lane 3: Pepsin
Lane 4: Pepsin & Kiwi 1.7mg/ml
Lane 5: Pepsin & Kiwi 3.4mg/ml
Adding value

Kiwifruit pulp enzyme extract - enhances digestion of proteins

Percentage of protein digested

- Beef
- Milk
- Tofu

No Addition

With Digesten® Kiwifruit Enzyme
Adding value

Kiwifruit skin extract - enhances growth of healthy gut bacteria
Adding value

Kiwifruit Complex – clinical trial

Encapsulated green kiwifruit extract: a randomised controlled trial investigating alleviation of constipation in otherwise healthy adults
(a) Defecation frequency (times/wk)

- Encapsulated kiwifruit extract
- Placebo
- Pre-trial baseline

Defecation frequency (average number of BM/week)
Lesson 10: Science can be risky...

... and is expensive
Conclusions Part 4

Prolonged consumption of a New Zealand red wine significantly alters the lipoprotein profile but does not protect LDL from oxidation.

Lesion development is reduced in animals consuming red wine compared to white wine.

Protein expression in the aortic arch is significantly altered.

Lesson 11: NZ is well supplied with experts
So… where has New Zealand Extracts Ltd got to today

1. Exporting and selling domestically innovative natural ingredients

   Oxi-fend®

   Digesten®

   Yinanza®

2. About to move into a new production facility

2. Getting closer to the customer

   tuatara™
Lessons from the NZEL journey

Location
Lessons from the NZEL journey

Location

Iconic quality raw materials
Lessons from the NZEL journey

Location

Iconic quality raw materials

People
Lessons from the NZEL journey

Location

Iconic quality raw materials

People

Know the market
Lessons from the NZEL journey

Location

Iconic quality raw materials

Know the science

People

Know the market
Lessons from the NZEL journey

Adding value

Location

Iconic quality raw materials

Know the science

Know the market

People
Lessons from the NZEL journey

Adding value

Location

Iconic quality raw materials

Know the science

Know the market

People
Lessons from the NZEL journey

Adding value

Location

Know the science

Know the market

Iconic quality raw materials

People
Conclusions Part 4

Prolonged consumption of a New Zealand red wine significantly alters the lipoprotein profile but does not protect LDL from oxidation.

Lesion development is reduced in animals consuming red wine compared to white wine.

Protein expression in the aortic arch is significantly altered.

Acknowledgments

Dr Sally McCormick
Dr Wayne Sutherland
Dr Alan Hayman
Dr Greg Jones
Mr Mathew Byers
Everyone else in Lab 202