

INDUSTRY-RELATED RESEARCH

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Polyphenols

Flavonoids

Flavan-3-ols

Flavones

Flavanones

Flavonols

Anthocyanins

Isoflavones



Q: HOW CAN WE INCREASE FLAVONOID INTAKE?

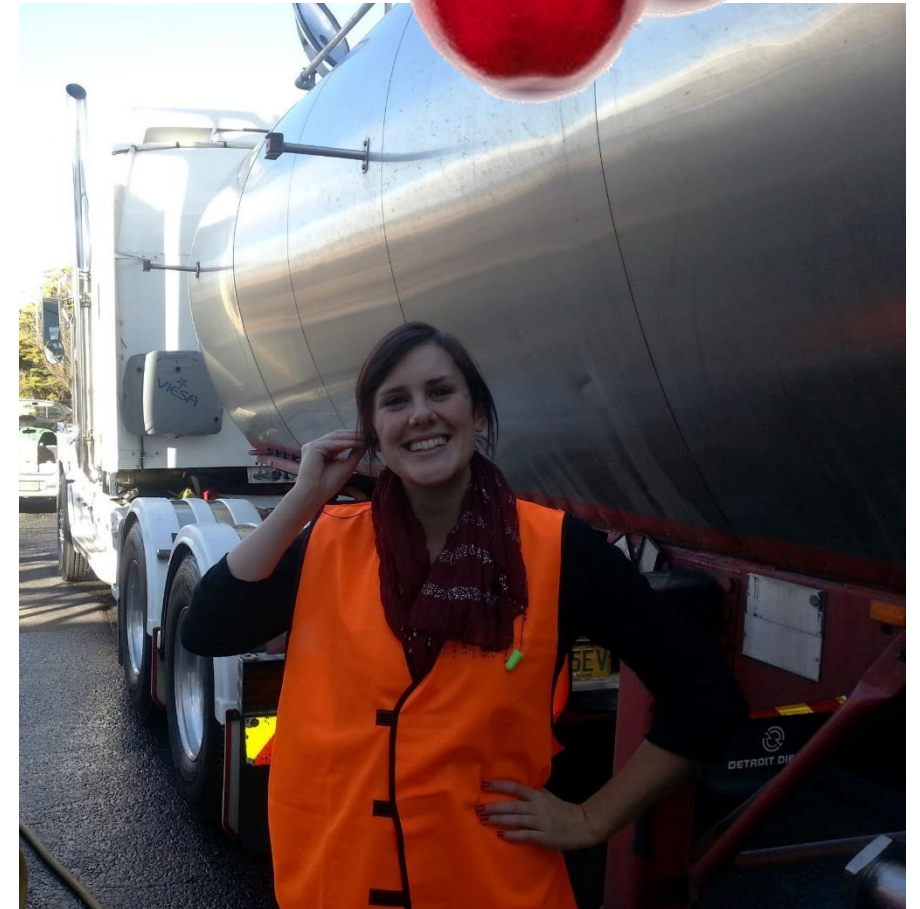
1. Get people to consume more plant-based foods
2. Improve the foods people consume to contain more flavonoids
 - Enhance food growth & processing conditions



ANTHOCYANIN-RICH CHERRY JUICE

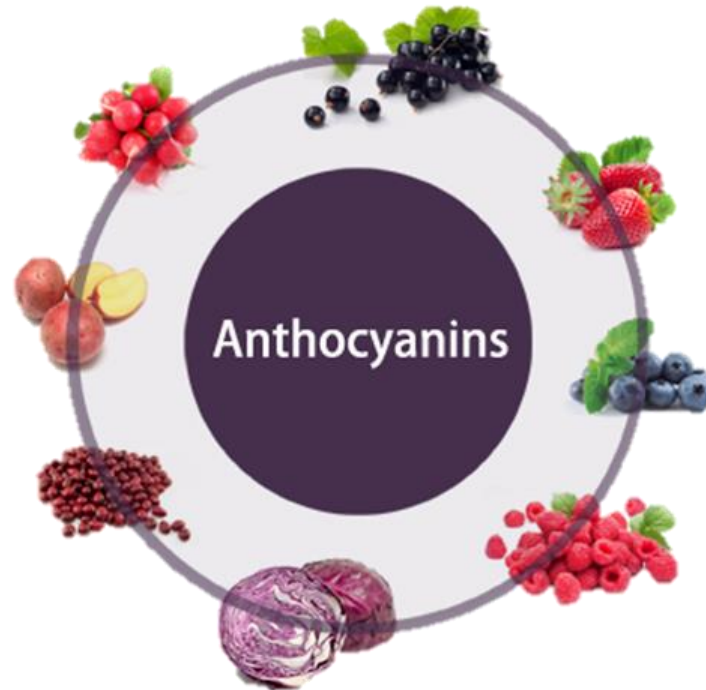
- Minimally processed
- Cold pressed
- “Nectar/Puree like”
- Flavonoid & anthocyanin-rich (naturally)

There is a huge consumer demand for ‘healthier’ products. But do these translate into additional health benefits?



OUR INDUSTRY-RELATED RESEARCH

AIM: Human clinical trials to investigate the acute and longer term effect of consuming anthocyanin-rich cherry juice vs a low flavonoid commercial apple juice on cognition and blood pressure (BP) in older adults and people with dementia.



HOW DID WE COLLABORATE?

1. Industry partner met my PhD supervisor at a networking event
The company was actively seeking an independent, academic research team.

2. Industry partner contacted my PhD supervisor to initiate collaboration
• The company needed time to 'work behind the scenes' to prepare their business for this venture.

3. A mutually beneficial 'research plan' was discussed – at some length –
between both parties.
• Balancing the scales was important

4. We actively sought research funds through university schemes to support our
studies
• The company did not have enough 'spare' \$ for research. So, it was up to us to find a grant.

5. An official contract was 'set-up' through the University of Wollongong's
research division, lawyers etc.



LEVEL OF INDUSTRY INVOLVEMENT

INDUSTRY

Anthocyanin-rich Cherry juice (in-kind)



Commercial Apple juice (in-kind)



NOT INDUSTRY

Funding

Facilities



BALANCING OF 'NEEDS' IN RESEARCH

ACADEMIA

- IP ownership
- Transparency
- Scientific Rigour

INDUSTRY

- Cost/Benefit Analysis
- Firm deadlines
- Accountability/Deliverables



OUTCOMES

Academic Team

- 2 high quality journal articles
- Establishment of a new academic team/group
- Gained reputation with novel flavonoid intervention trials

Industry Team

- Commercialisation of their juice
 - Sells this juice and other 'value added products' to 'health sector'
- Increase in sales of 'value added products' → innovative products for 'cherry industry'
 - Extracts, powders, ciders, wines

ADVANTAGES OF INDUSTRY RESEARCH



Industry and academia can tackle complex public health problems with a greater variety of expertise, perspectives, and resources

Mutually beneficial research is possible

- but clarity and transparency is needed from both sides

Can reduce cost of trials

- whether \$ or in-kind support – this can be very beneficial in our competitive grant world

DRAWBACKS OF INDUSTRY RESEARCH

It is complex to align mutually beneficial outcomes:

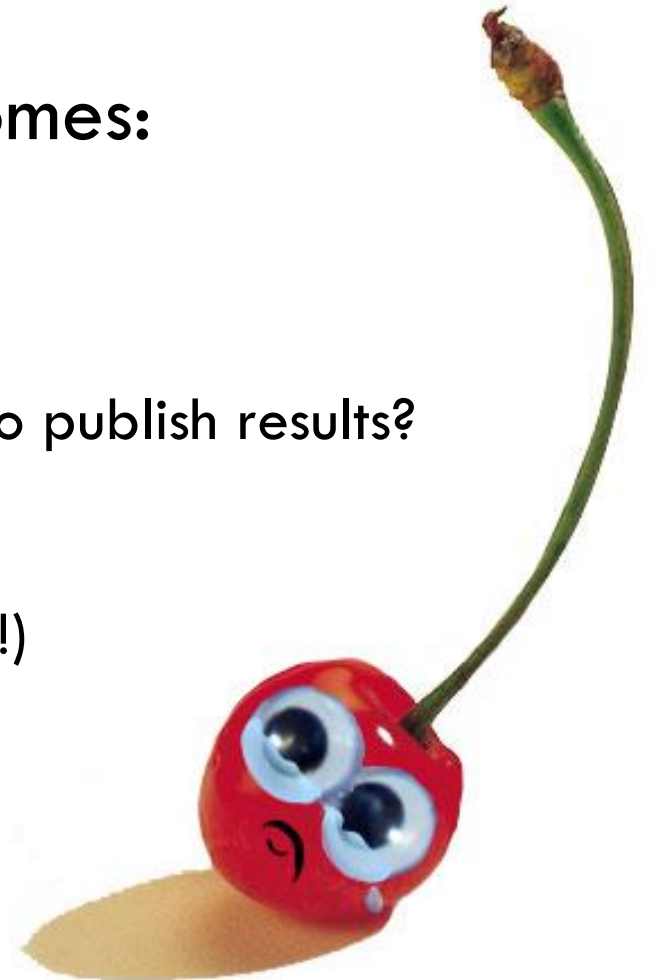
- Scientific discovery vs economic benefit

IP ownership challenges

- negotiate these strongly from the beginning – do you have to publish results?

Scepticism of industry funded research

- Ethical implications in food/nutrition research (ie. BIG FOOD!)
- 30% more likely to show a beneficial outcome
- Conflict of interest + source of funding must be declared



KEY STRATEGIES FOR SUCCESS



- Personal stories are the best way to explain ways to engage industry
 - Talk to these people about what worked and what didn't. They are also people who may know of possible industry partners.
- Researchers need to think deeply about who their possible 'customers' are.
 - Who are the 'next users' of your research?
 - Plan how you would go about talking to them?
- Network!
 - Outside your sphere

RESOURCES



- **OVERVIEW OF WHY ENGAGE WITH INDUSTRY**
 - National Innovation and Science Agenda (NISA) & the National Science Statement.
- **FUNDING**
 - Cooperative Research Centres, ARC and NHMRC linkage schemes, and the Innovation Connections scheme.
- **YOUR LOCAL COMMERCIALIZATION TEAM**
 - Are your best bet
 - Can help you get introduced to potential industry, setting up contracts, and assisting with grants.