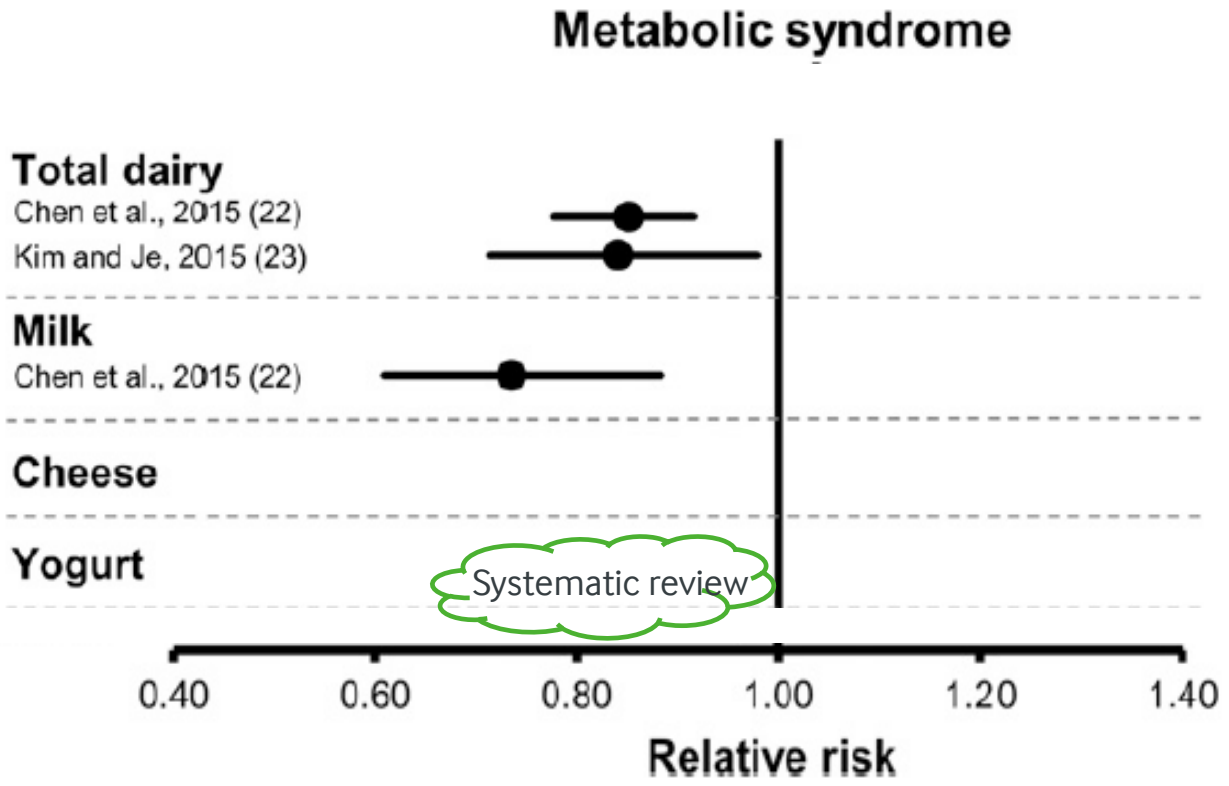
Dairy & Metabolic syndrome

-The view of an industrial scientist

Lea Brader, Nutrition Scientist, PhD

Outline of meta-analyses

Dairy lowers risk of Metabolic Syndrome



Moderate-quality evidence*

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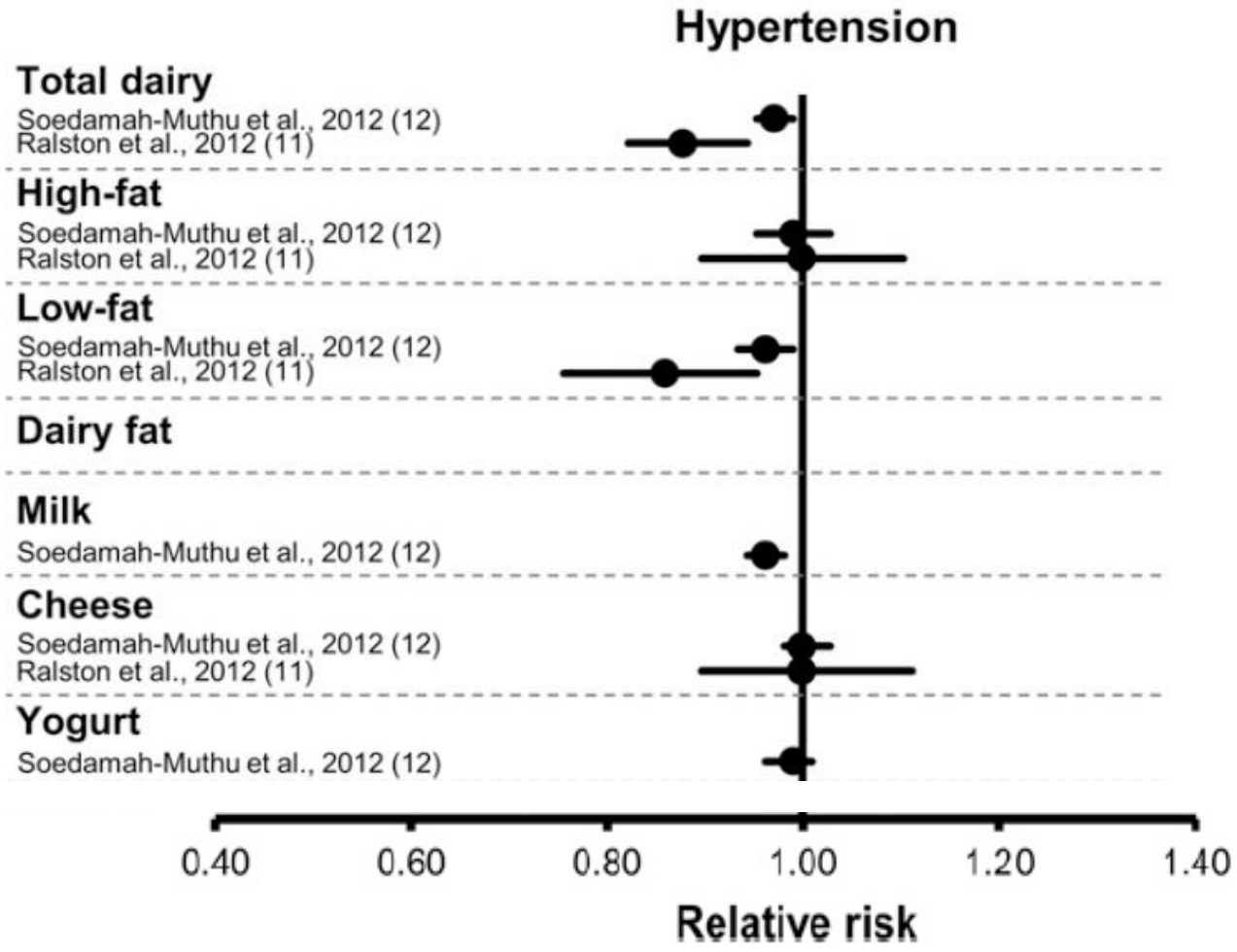
*defines a situation in which “we are moderately confident in the effect estimate”

Drouin-Chartier et al. Adv Nutr 2016;7:1026–40

Sayon-Orea et al. Adv Nutr 2017;8(Suppl):146S–54S

Outline of meta-analyses

Dairy lowers risk of Hypertension



High-quality evidence*

Moderate-quality evidence

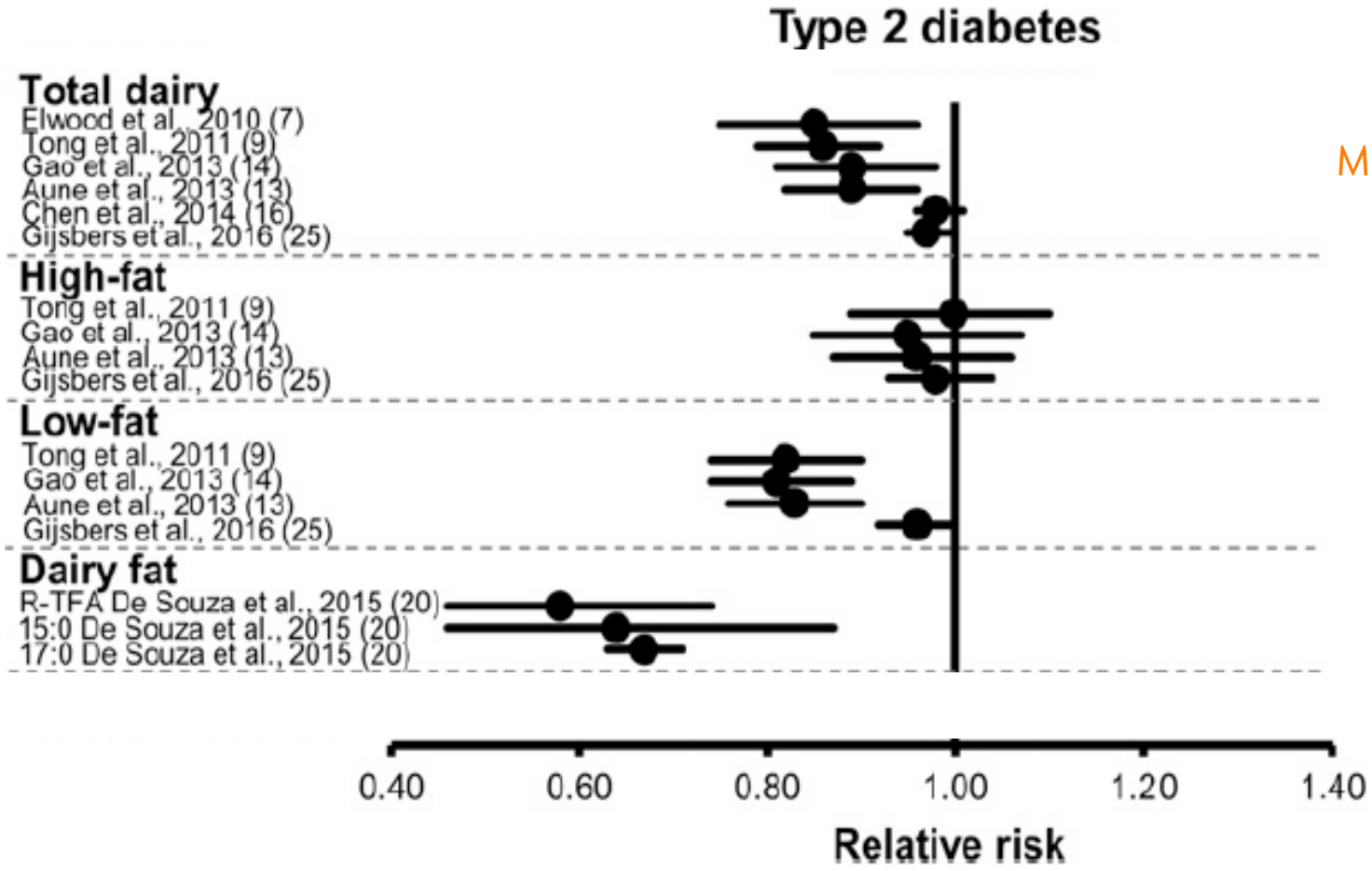
Moderate-quality evidence

*defines a situation in which "we are very confident that the true effect lies close to that of the estimate of the effect."

Drouin-Chartier et al. Adv Nutr 2016;7:1026–40

Outline of meta-analyses

Dairy lowers risk of Type 2 diabetes



Moderate-quality evidence

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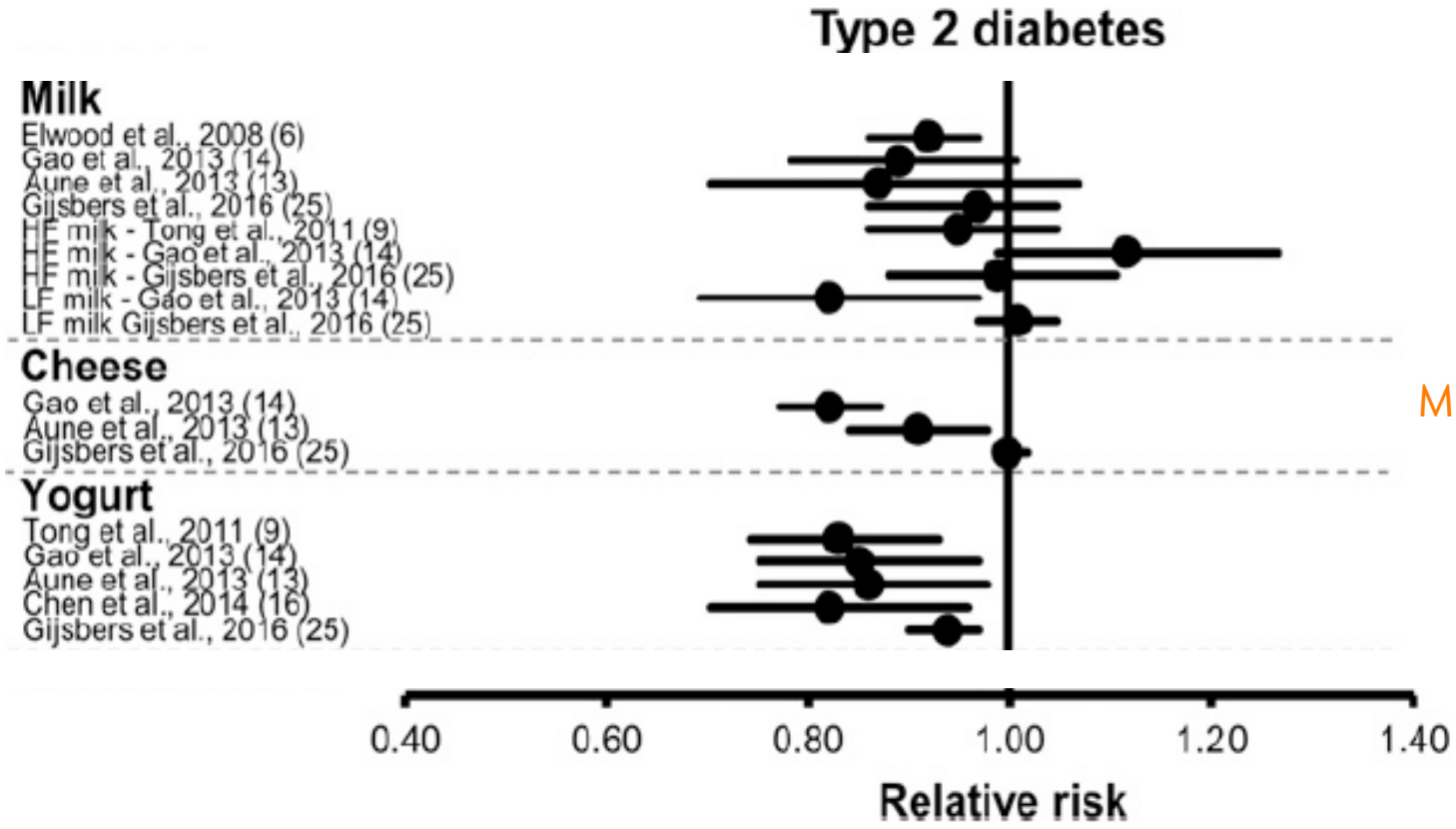
Outline of meta-analyses

Dairy lowers risk of Type 2 diabetes



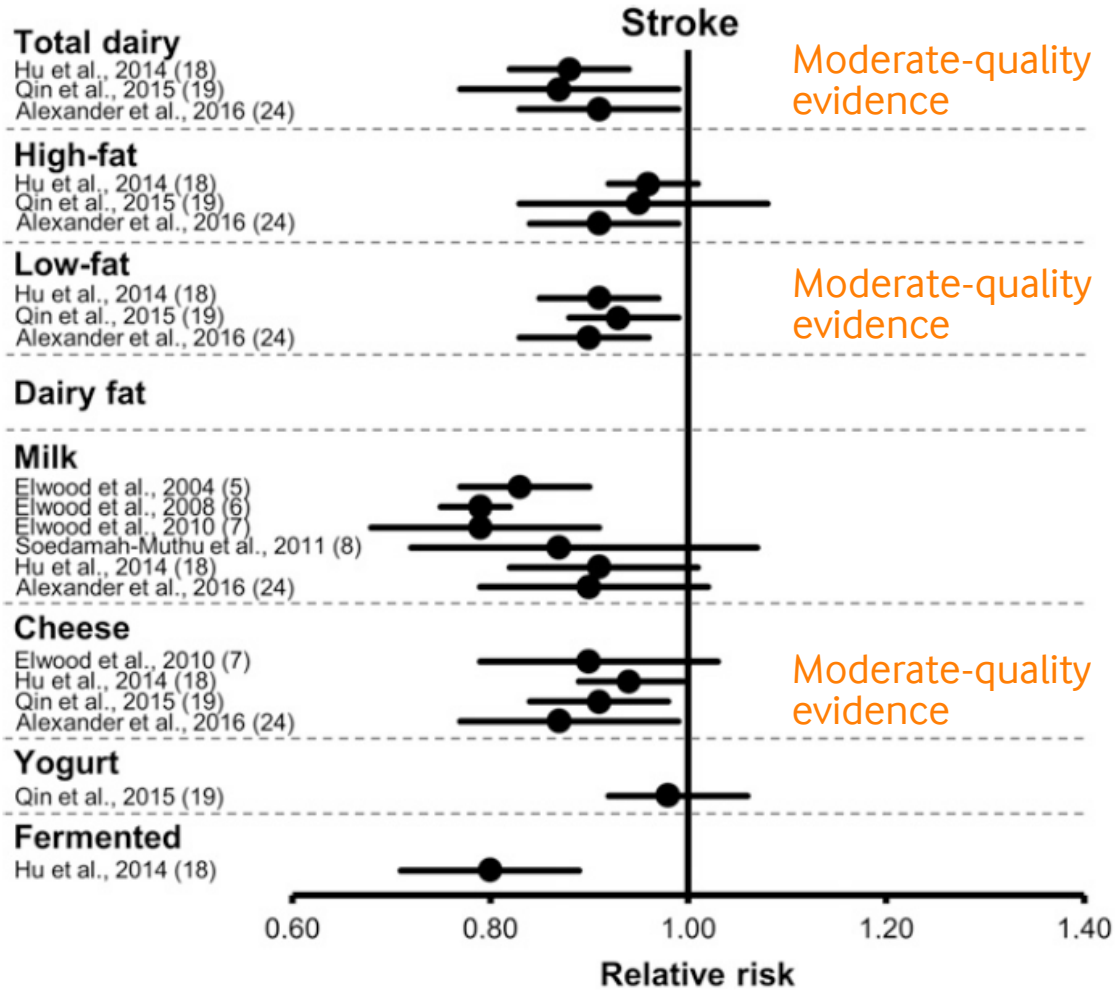
Moderate-quality evidence

High-quality evidence

Drouin-Chartier et al. Adv Nutr 2016;7:1026–40

Outline of meta-analyses

Dairy lowers risk of stroke but not CVD



Moderate-quality evidence

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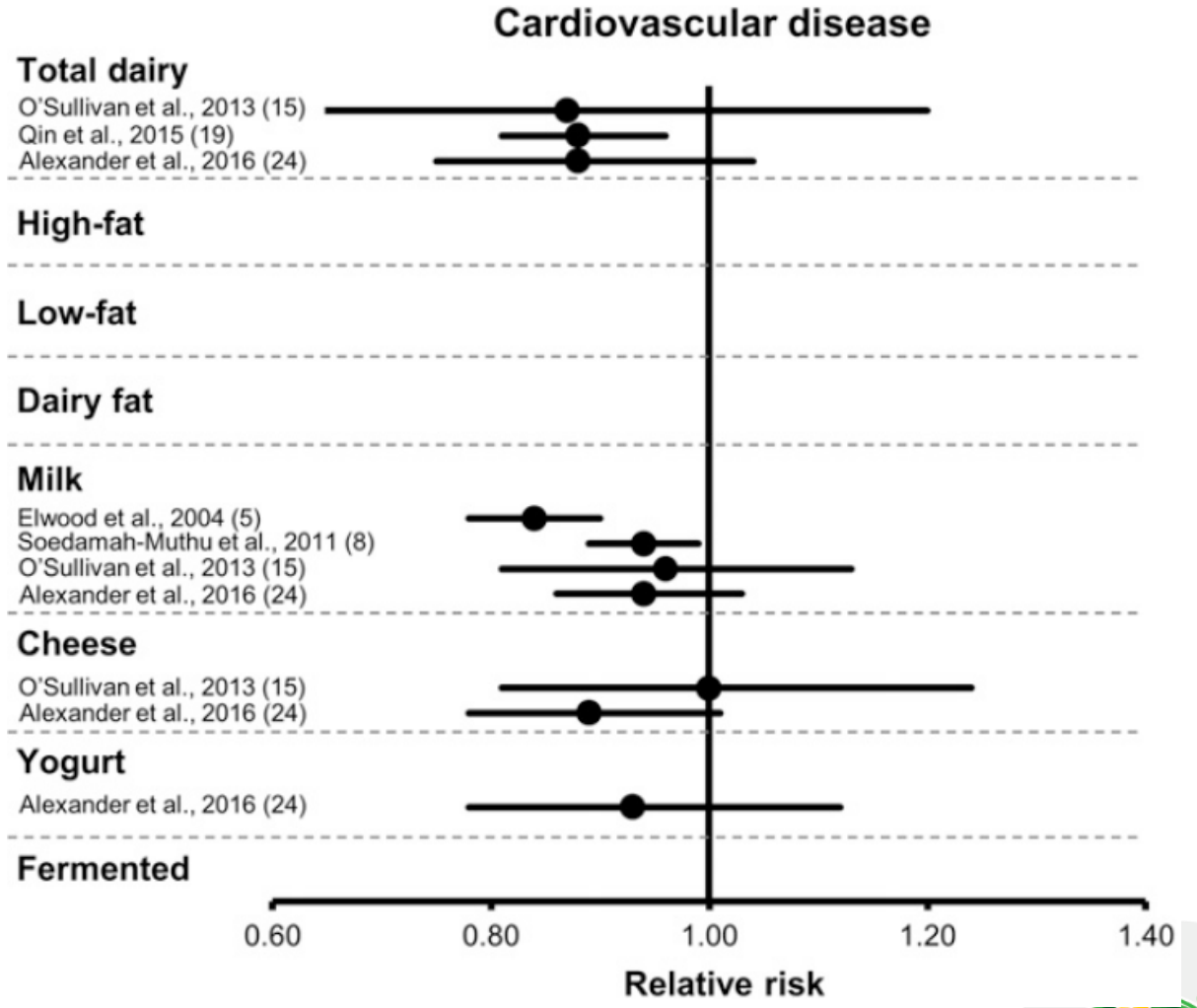
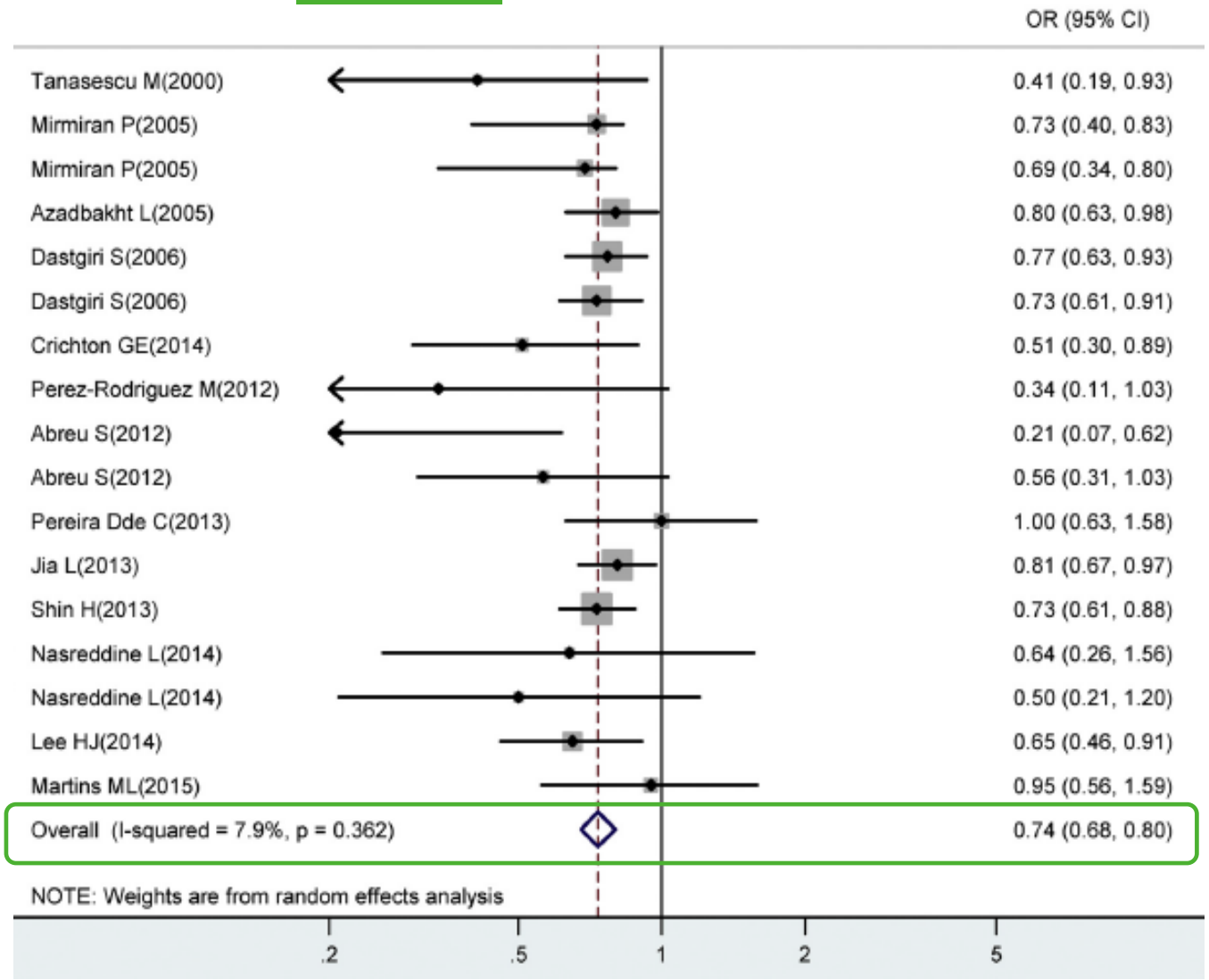


Drouin-Chartier et al. Adv Nutr 2016;7:1026–40

A recent meta-analysis

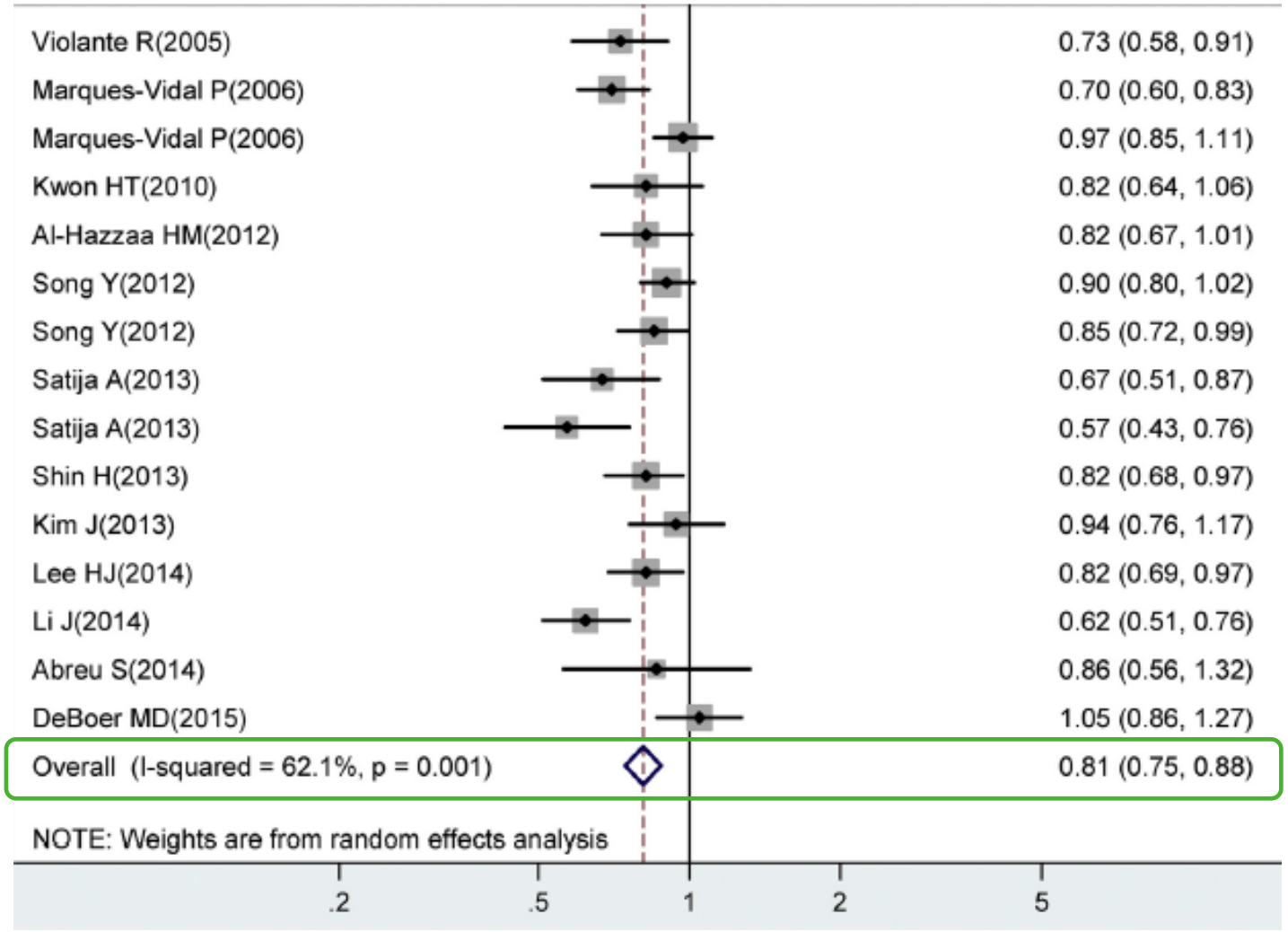
Dairy lowers risk of Obesity



Wang et al. Ann Epidemiol. 2016 Dec;26(12):870-882

A recent meta-analysis

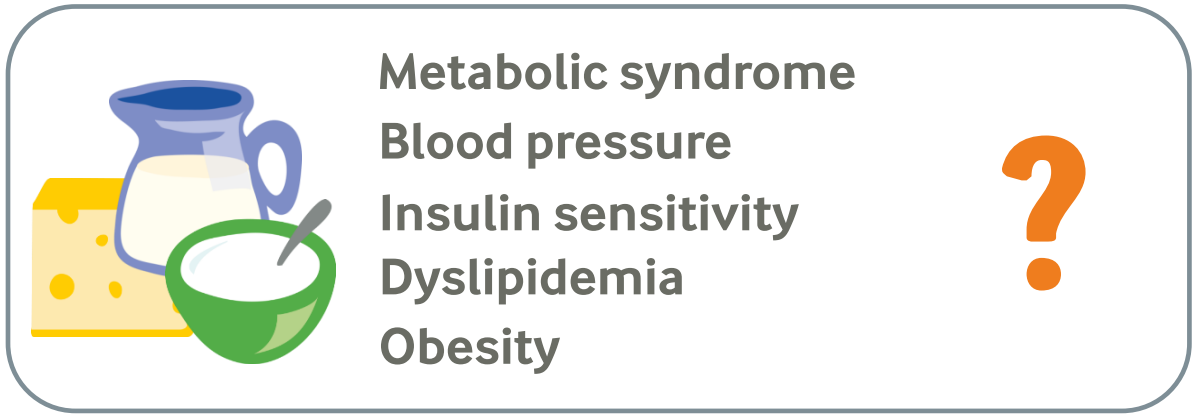
Milk lowers risk of Obesity



Wang et al. Ann Epidemiol. 2016 Dec;26(12):870-882

Controlled intervention trials

Neutral to favourable effect – evidence is limited



Lovegrove et al. Nutr Res Rev 2016 Dec;29(2):249-267
Thorning et al. Food Nutr Res 2016 Nov 22;60:32527
Drouin-Chartier et al. Adv Nutr 2016;7:1041–51
Dumas et al. Eur J Nutr 2016 Nov 2. [Epub ahead of print]

Research GAPS within dairy & MetS

RCTs on actual dairy foods are needed...

Research gaps

- Controlled research from intervention trials (RCT)
- Reseach on actual foods (not ingredients)
- Reseach on individual foods (yoghurt, cheese, milk)
- Research on amounts within recommendations

"The cardiometabolic effects of different dairy foods represent a major unanswered question of modern nutrition science. Most dietary guidelines are largely based on theoretical considerations about selected single nutrients (calcium, vitamin D, calories, saturated fat), rather than empirical evidence on health effects of the actual foods."

Dariush Mozaffarian. Circulation. 2016;133:187-225

Arla Foods for Health - facilitate dairy research through funding and expertise

We cannot communicate this knowledge on dairy

...since food companies are not allowed to communicate it (EFSA)

Cannot

Health claims on **whole foods**

Scientific consensus

Textbook knowledge

Can

Health claims based on single **nutrients** in dairy:

BLOOD PRESSURE
Potassium

OXIDATIVE STRESS
Vitamin B2

Health claims based on added non-dairy **ingredients**:

BLOOD SUGAR
Sweeteners, Iodine, Inulin...

BLOOD CHOLESTEROL
Plant sterols, β-glucan...

But we can play on nutrients associated with health…

...and have several products for at risk people

And be inspired by science when creating new products…

Protein

Grains

Fiber

Vegetables

Pulses

- Viscosity
- Energy density
- Gut hormones
- Gut transit time

etc. .....

Satiety

- for obesity prevention

And be true to science in our communication

You can claim health on not healthy products...

- Based on science, we know that dairy is good for health - recommended worldwide
- All dairy products can be part of a healthy diet BUT in quantities that balances culinary and nutritional needs
- Help people make healthy choices by increasing product transparency

Example **Vitamin A**

32 g

30 g

Amount providing 30% of recommended daily intake

✓ Health claim allowed

- Move the Arla Brand assortment in a healthier direction

Lea Brader

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