



Melanie McGrice, AdvAPD

4 strategies for assisting clients who are trying to conceive

THE FIRST 1000 DAYS



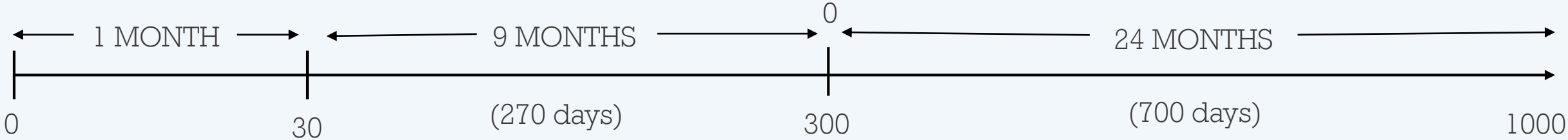
FERTILITY



PREGNANCY



INFANCY



Do you know someone who has struggled to
conceive?

1 in 6 couples
struggle to conceive





Nutrition has a significant impact on fertility

5 dietary changes improved infertility by 69%

[Obstet Gynecol.](#) 2007 Nov;110(5):1050-8.

Diet and lifestyle in the prevention of ovulatory disorder infertility.

[Chavarro JE](#)¹, [Rich-Edwards JW](#), [Rosner BA](#), [Willett WC](#).

⊕ Author information

Abstract

OBJECTIVE: To evaluate the relation of a dietary pattern and other lifestyle practices to risk of ovulatory disorder infertility.

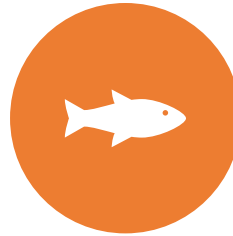
METHODS: We followed a cohort of 17,544 women without a history of infertility for 8 years as they tried to become pregnant or became pregnant. A dietary score based on factors previously related to lower ovulatory disorder infertility (higher consumption of monounsaturated rather than trans fats, vegetable rather than animal protein sources, low glycemic carbohydrates, high fat dairy, multivitamins, and iron from plants and supplements) and other lifestyle information was prospectively related to the incidence of infertility.

RESULTS: Increasing adherence to a "fertility diet" pattern was associated with a lower risk of ovulatory disorder infertility. The multivariable-adjusted relative risk of ovulatory disorder infertility comparing women in the highest with women in the lowest quintile of the "fertility diet" pattern score was 0.34 (95% confidence interval 0.23-0.48; P for trend<.001). This inverse relation was similar in subgroups defined by women's age, parity, and body weight. A combination of five or more low-risk lifestyle factors, including diet, weight control, and physical activity was associated with a 69% lower risk of ovulatory disorder infertility and an estimated population attributable risk of 66% (95% confidence interval 29-86%).

CONCLUSION: Following a "fertility diet" pattern may favorably influence fertility in otherwise healthy women. Further, the majority of infertility cases due to ovulation disorders may be preventable through modifications of diet and lifestyle.

LEVEL OF EVIDENCE: II.

Dietary patterns which helped improve fertility



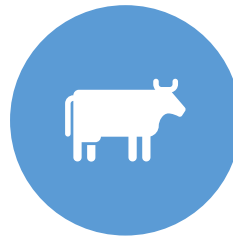
DIET RICH IN
MONOUNSATURATED FAT
AND LOW IN TRANS FATS



INCREASING PLANT
PROTEIN INTAKE



LOW GI



HIGH FAT, RATHER THAN
LOW FAT DAIRY
PRODUCTS



FOLIC ACID
SUPPLEMENTATION



HIGHER INTAKE OF IRON,
ESPECIALLY FROM PLANT
SOURCES



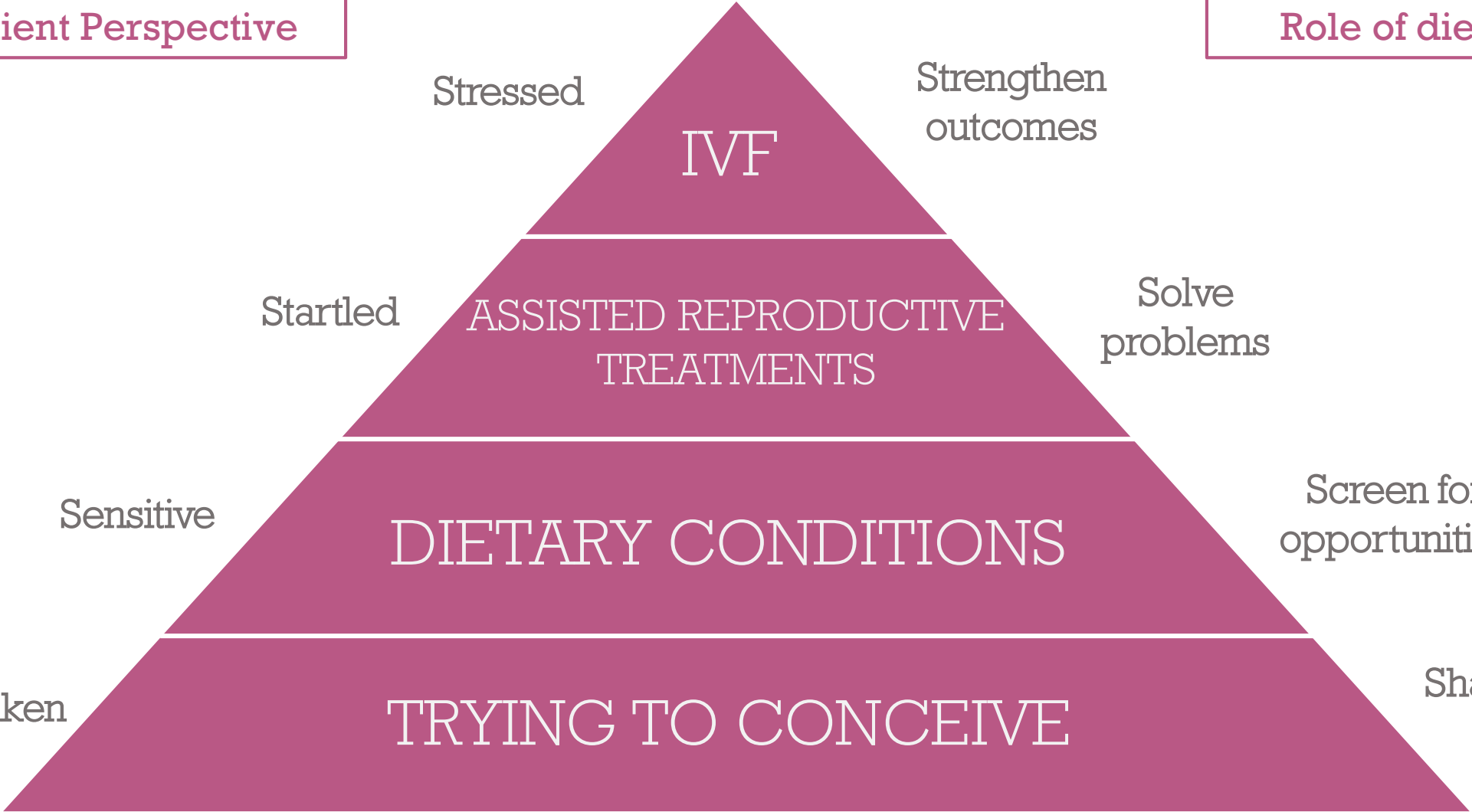
Lack of referrals

THE 4 STAGES OF SUPPORT™

FOR CLIENTS WHO ARE TRYING TO CONCEIVE

Client Perspective

Role of dietitian





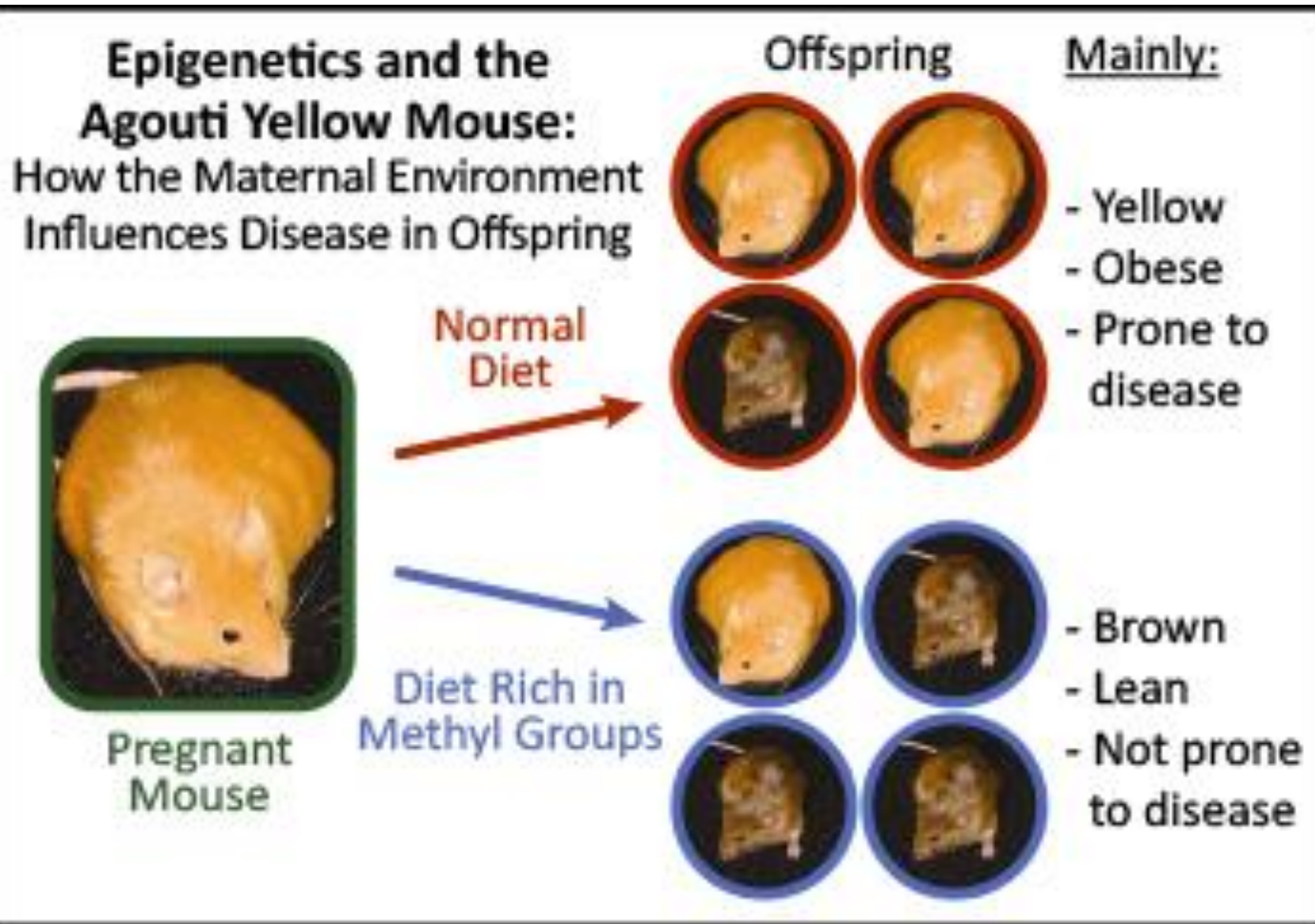
SHOW IMPACT OF NUTRITION - genetic programming

Changes in gene
function that do not
involve changes in the
DNA sequence

Epigenetics



The same set of genes but with different expression of those genes



ELN can help to prevent....

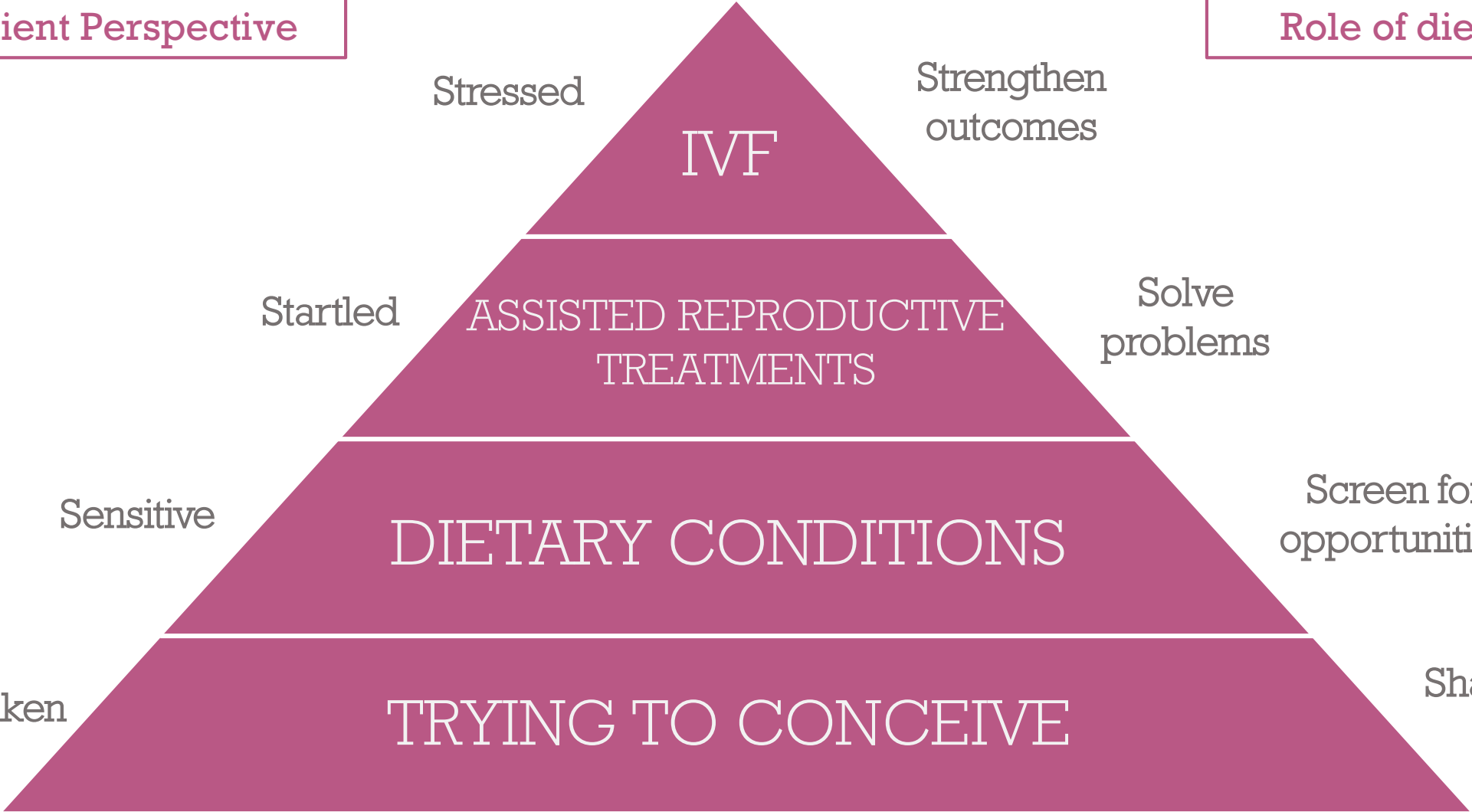


THE 4 STAGES OF SUPPORT™

FOR CLIENTS WHO ARE TRYING TO CONCEIVE

Client Perspective

Role of dietitian



Stressed

Strengthen outcomes

IVF

Startled

ASSISTED REPRODUCTIVE TREATMENTS

Solve problems

Sensitive

DIETARY CONDITIONS

Screen for opportunities

Shaken

TRYING TO CONCEIVE

Shape baby's future



SCREEN FOR OPPORTUNITIES – undiagnosed Coeliac Disease

Undiagnosed/untreated Coeliac Disease

- Decreased nutrient absorption
- Undiagnosed CD is 3 x higher in women with infertility

Thyroid conditions

- Thyroid disease 4-5x more common in women than men
- Disruption to menstrual cycle (eg altered cycle length & bleeding), hormone imbalance

Cushing's syndrome

- Too much cortisol causes rapid weight gain & irregular or non-existent menstrual cycles

Endometriosis

- 30-50% of women have reduced fertility
- Excessive tissue growth may impede ovulation, egg transfer or implantation





PCOS

- Affects 12-21% of women of reproductive age
- Can cause ovulatory dysfunction

Insulin resistance

- 60 % of overweight individuals have IR
- Increases metabolic abnormalities (excess androgens, spontaneous abortions)

Diabetes (Type II)

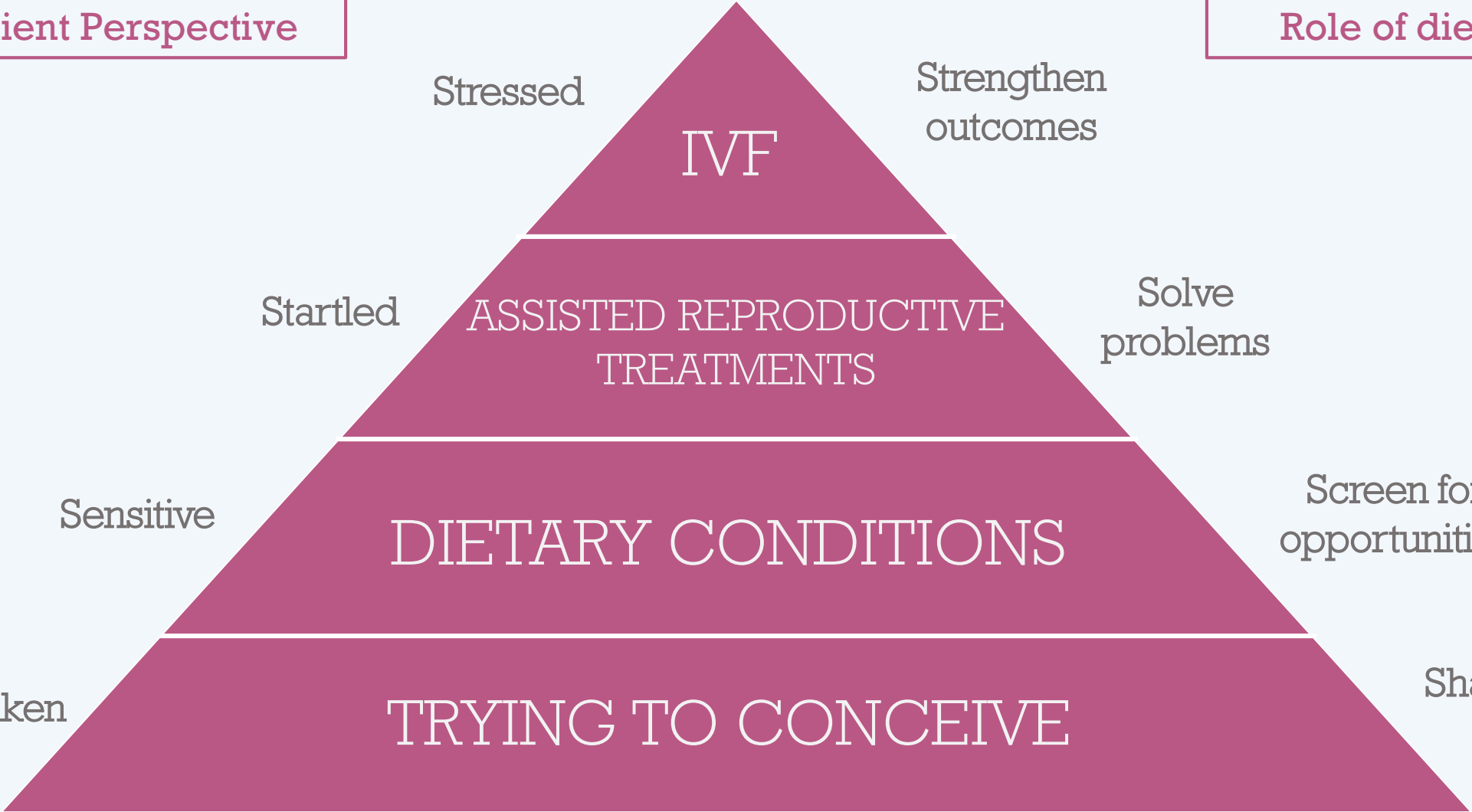
- Increased risk of infertility due to IR, greater risk of spontaneous abortion, foetal abnormalities and pregnancy complications & early menopause

THE 4 STAGES OF SUPPORT™

FOR CLIENTS WHO ARE TRYING TO CONCEIVE

Client Perspective

Role of dietitian



Stressed

Strengthen outcomes

IVF

Startled

ASSISTED REPRODUCTIVE TREATMENTS

Solve problems

Sensitive

DIETARY CONDITIONS

Screen for opportunities

Shaken

TRYING TO CONCEIVE

Shape baby's future



SOLVE PROBLEMS - body fat

Body fat is crucial for the production of the female hormone oestrogen

- Affects hormone production, making process of ovulation more difficult
- Reduced production of oestrogen
 - Imbalance with other sex hormones (FSH, SHBG)
 - Ovulatory dysfunction
 - Amenorrhea
 - Delayed puberty

Distribution of patients according to menstrual patterns	
Menstrual Function	BMI <18.5
Regular Cycle	5 (10.42%)
I Amenorrhea	6 (12.50%)
II Amenorrhea	7 (14.58%)
Oligomenorrhea	20 (41.67%)
Dysmenorrhea	3 (6.25%)
Menorrhagia	2 (4.17%)
Menometrorrhagia	5 (10.42%)
Total	48 (100%)

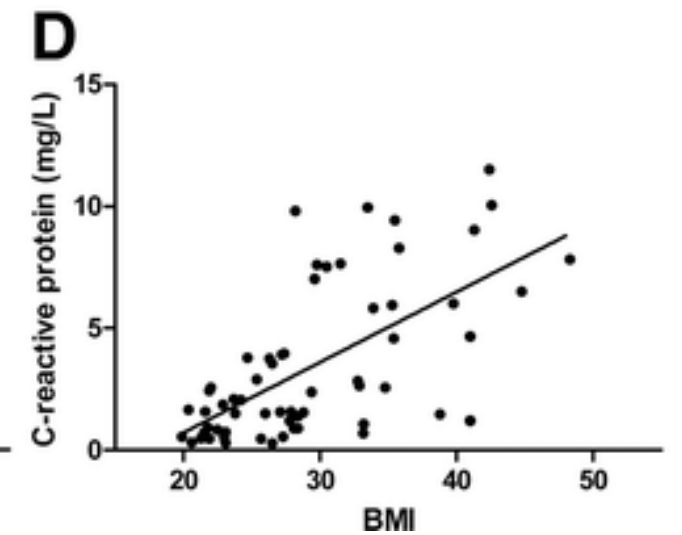
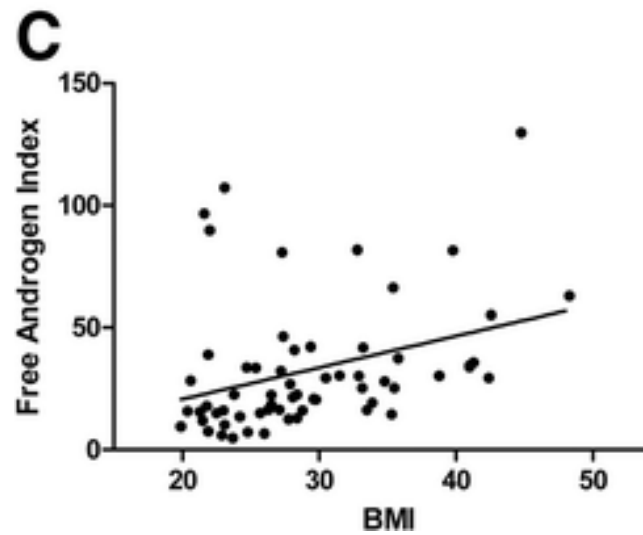
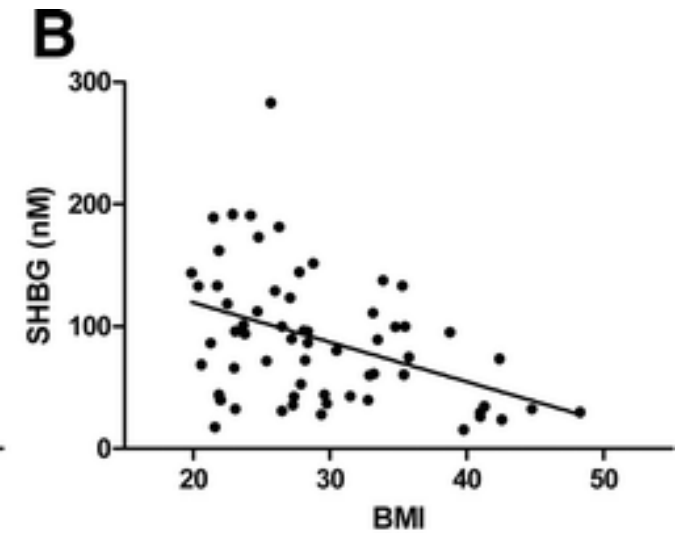
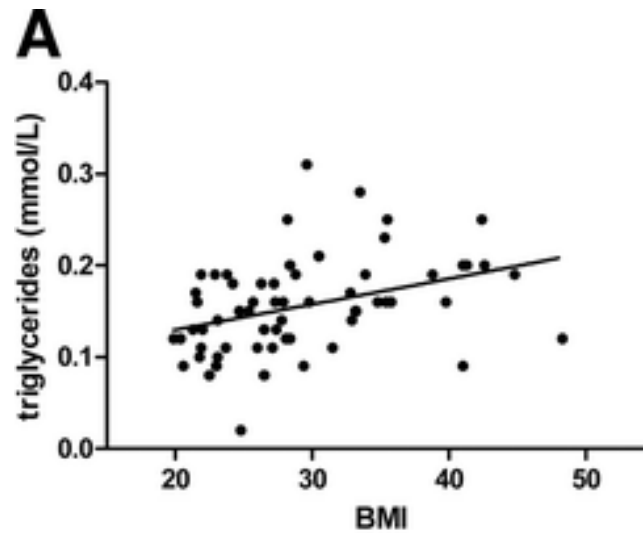
For every point (over 29) her chance
of falling pregnant falls by 4%

Health of her eggs

The release of her eggs

Implantation of her
eggs

- Overweight women have high levels of fat and inflammation surrounding eggs → impacts developmental potential
- Women with obesity have 'disorganised' DNA
 - Leading reason for difficulty with fertilisation

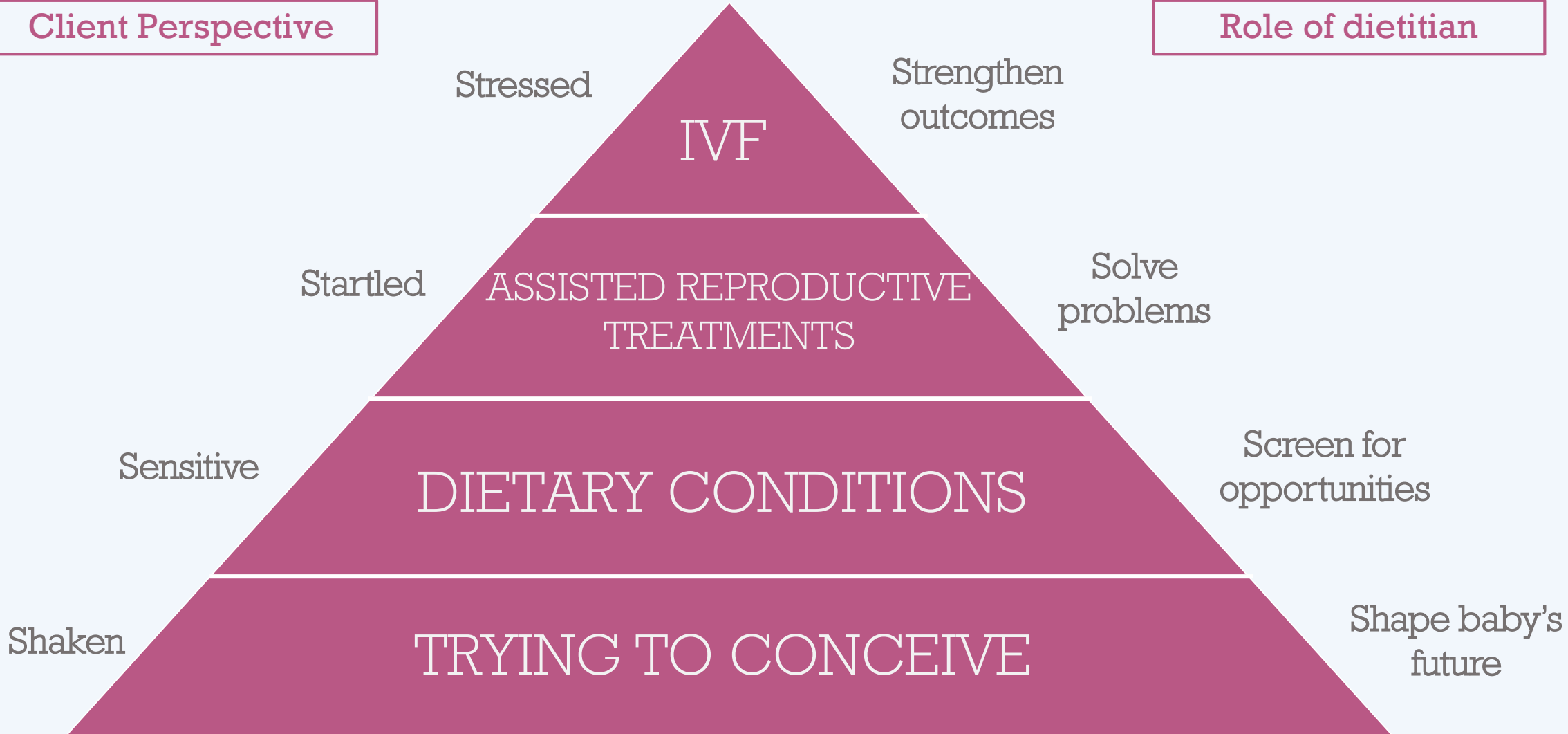


THE 4 STAGES OF SUPPORT™

FOR CLIENTS WHO ARE TRYING TO CONCEIVE

Client Perspective

Role of dietitian



A close-up photograph of a clear glass being filled with milk. The milk is being poured from a source above, creating a thick, white stream that falls into the glass. The glass is partially filled with milk, and the surface of the liquid is visible. The background is a solid, vibrant teal color. The lighting is bright, highlighting the texture of the milk and the clarity of the glass.

STRENGTHEN OUTCOMES - dairy

-
- Some rat studies suggest galactose may impact ovulation
 - Possibly why full cream milk appears to be a better choice than low fat milk for fertility

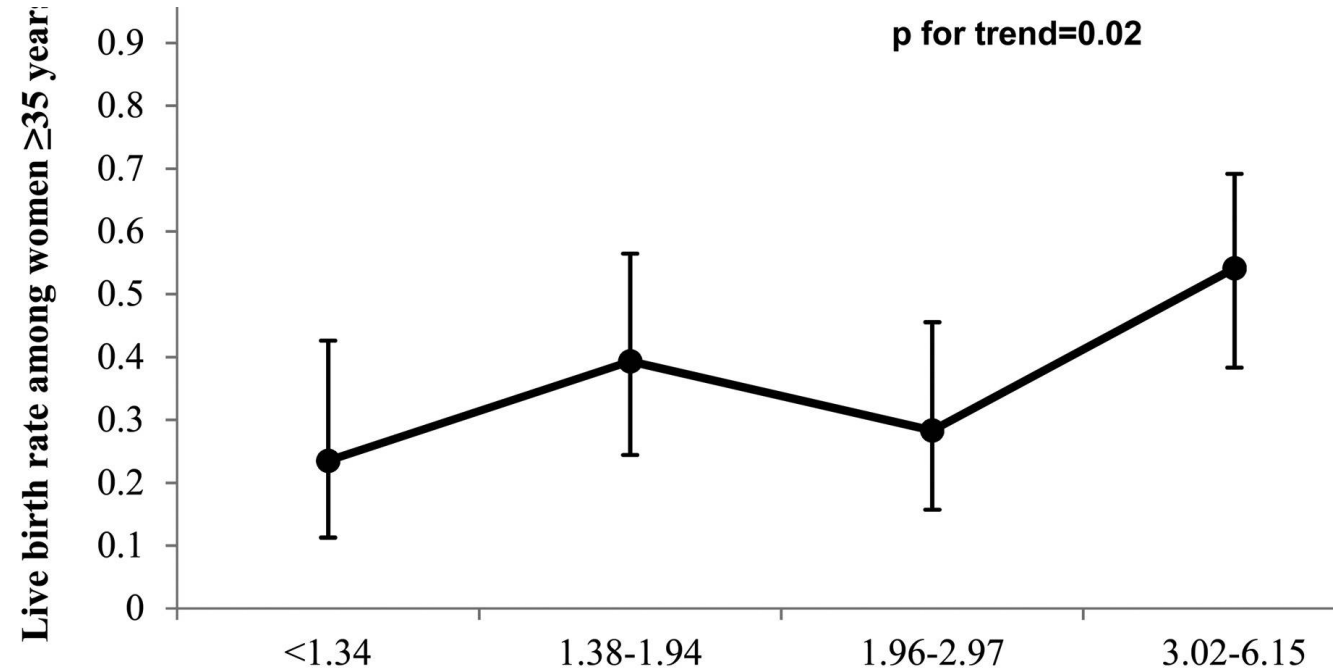


- Fertility Risk Factor Study
- Greenlea et al (2003)
- 322 cases and controls
- drinking ≥ 3 glasses cow's
milk per day had a 70%
lower risk of infertility
than those who did not
consume milk



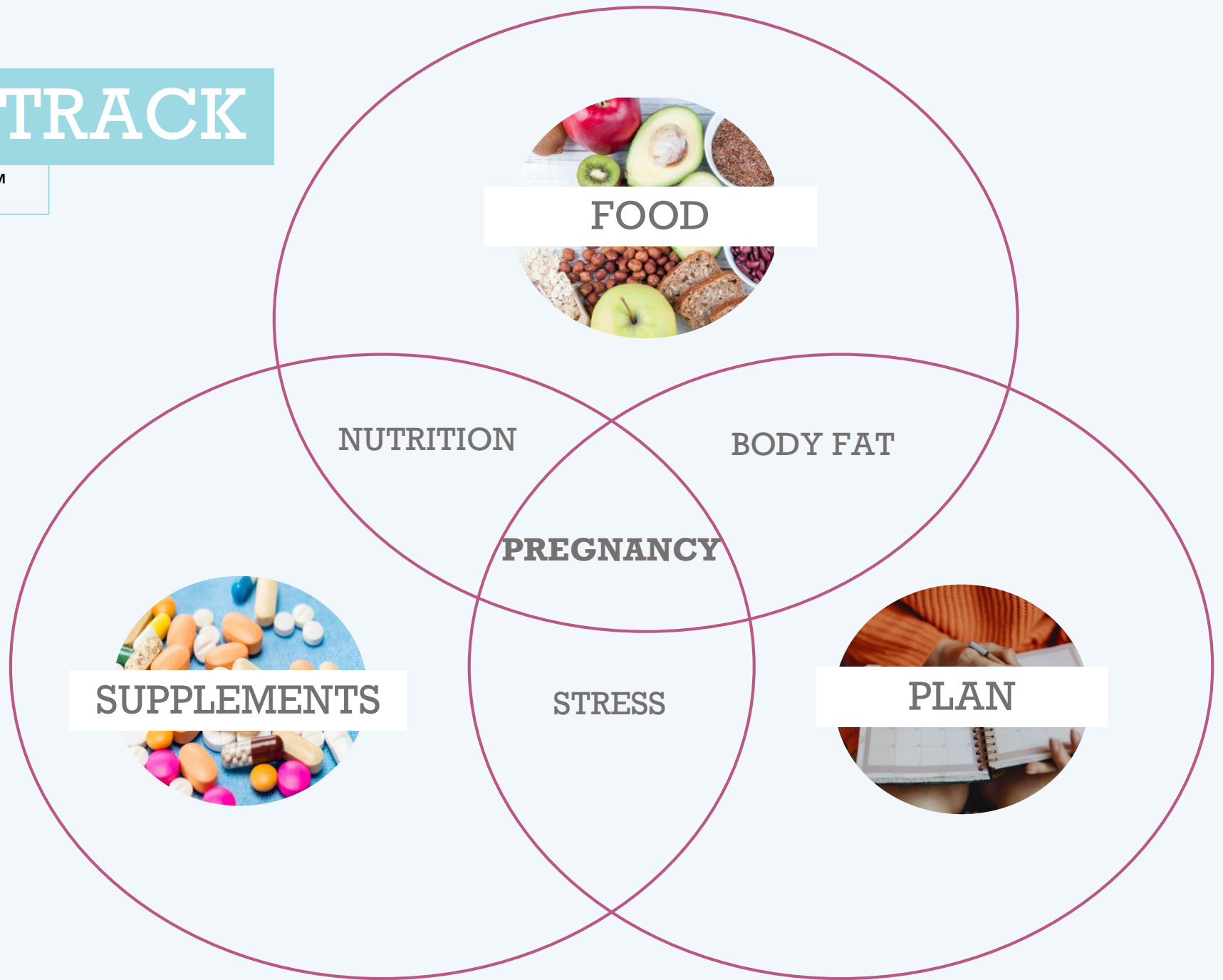
Afeiche et al (2016)

- Prospective cohort study of 232 women undergoing IVF
- 32% difference in implantation rates between top and bottom quartiles, 29% difference in pregnancy rates and 16% difference in live births
- Impact of IGF1?



THE
FERTILITY FASTRACK

FRAMEWORK™



FOOD

NUTRITION

BODY FAT

PREGNANCY

SUPPLEMENTS

STRESS

PLAN

Like to know
more?



Join our journal club –
www.nutritionplus.com.au/healthcarepro



Come to our ELN workshop –
elnworkshop.eventbrite.com.au



Become an affiliate –
melanie@melaniemcgrice.com.au



Baby Essentials Kit

\$40

Hand-delivered with a hug by Compassion staff, the essentials kit for newborns is filled with the necessary supplies a mum needs to care for her bundle of joy.



Pregnancy Care

\$90

Your gift will provide a mum with life-saving prenatal classes and checkups, plus crucial support during and after the delivery of her little one.



Skilled Birth Attendant

\$125

Providing a professionally skilled birth attendant is one of the most strategic ways to help save the lives of a mother and her baby.

Donate to our Tanzanian Mum's & Bub's Centre

Go to <https://give.everydayhero.com/au/nutritioncentre>

Thank you!


Melanie
McGrice

Contact me with your thoughts,
comments and questions on
social media

www.melaniemcgrice.com

 @MelanieMcGriceDietitian

 @MelanieMcGrice

 @MelanieMcGrice

 @NourishWithMelanie

 @MelanieMcGrice

