



# **The SA Omega-3 Test-And-Treat Program**

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Implementation Partnership**

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# Why Are We Doing This?

- New evidence-based recommendation issued as part of Australian Pregnancy Care Guidelines

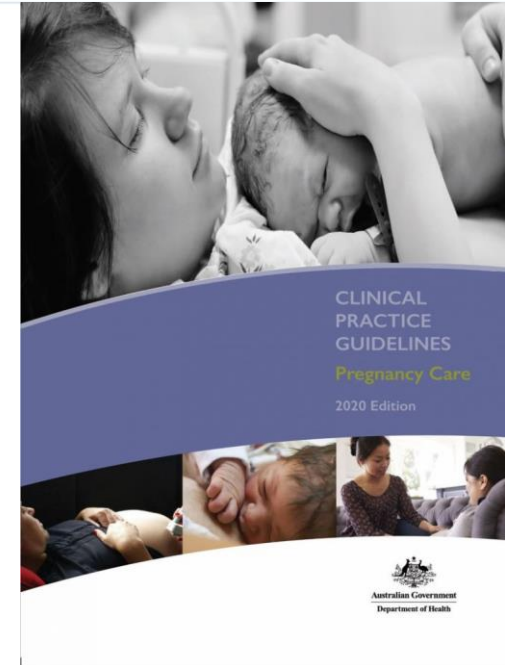
*Key evidence used to underpin the guideline*

## **2018 Cochrane review -**

EPTB <34 weeks' - 42% reduction from 4.6 to 2.7%  
11 trials with 5,409 women

PTB <37 weeks' - 11% reduction from 13.4 to 11.9%  
25 trials with 10,256 women

**2019 ORIP trial - contemporary Australian practice**



***“advise supplementation (800mg DHA 100mg EPA) for women with low omega-3 to reduce prematurity risk”***

# Omega-3 to Reduce the Incidence of Prematurity (ORIP)

- Largest contemporary trial
- Overall, no effect of omega-3 supplementation on prematurity risk in a broad population of women, many of whom take prenatal supplements
- Secondary analyses: Benefit limited to women with low or depleted omega-3 status at study entry  
77% reduction in EPTB (RR 0.23, 0.07 - 0.79)
- These data are now backed up by ADORE trial (USA) and other cohort analyses showing beneficial associations below certain omega-3 thresholds



# Gaps Between the Omega-3 Guideline and What May Be Feasible in Practice

- No widely available omega-3 testing for pregnant women in the health system
- Gap in knowledge by health professionals and women knowing what action to take based on the result of the omega-3 test in early pregnancy
- **So, our aim was to set up an omega-3 test-and-treat program that could be embedded in standard antenatal care to reduce the risk of prematurity**

# What Are We Assessing?

- **Feasibility** – Can we incorporate an omega-3 test into standard antenatal screening to identify and treat women with singleton pregnancies and low omega-3 status to reduce the incidence of early preterm birth
- **Adoption** – Will doctors and women embrace and use the program?
- **Effectiveness** – Does the program result in reductions in prematurity in the community?

# Partnership with SA Pathology

**MATERNAL SERUM SCREENING TEST**  
Down syndrome, Neural Tube Defects and other Pregnancy Pathologies

**SA PATHOLOGY**

**Patient Details** Ethnic Group:  Caucasian  Aboriginal  Asian  African-Caribbean

Family Name: \_\_\_\_\_ Given Name(s): \_\_\_\_\_

Date of Birth: \_\_\_\_\_ UR Number: \_\_\_\_\_ Medicare Number: \_\_\_\_\_

Address: \_\_\_\_\_

Suburb: \_\_\_\_\_ State: \_\_\_\_\_ Postcode: \_\_\_\_\_

**Clinical Details – Mandatory**

First Trimester Screen  Second Trimester  Neural Tube Defect only  Omega-3 status (SAHMRI)

EDD/LMP: \_\_\_\_/\_\_\_\_/\_\_\_\_ Cycle length (days): \_\_\_\_ Maternal weight (Kgs): \_\_\_\_

GA Clinical weeks + days: \_\_\_\_ on \_\_\_\_/\_\_\_\_/\_\_\_\_

GA Ultrasound weeks + days: \_\_\_\_ on \_\_\_\_/\_\_\_\_/\_\_\_\_

Crown-rump length (CRL) mm: \_\_\_\_ on \_\_\_\_/\_\_\_\_/\_\_\_\_

Pregnancy:  Singleton  Twins  Triplets IVF:  Yes  No Age at egg retrieval/age of egg donor: \_\_\_\_

Pregnancy complications: Diabetes (IDMM only)  Yes  No Smoker  Yes  No Previous  T21  T18/13

Name of Imaging Practice: \_\_\_\_\_

For first trimester screening risk assessment an Ultrasound request form is required for Nuchal Translucency, 11-14w0d.

Patient status at the time of the service or when the specimen was collected:

a private patient in a private hospital or approved day hospital facility  
 a private patient in a recognised hospital  
 a public patient in a recognised hospital  
 an outpatient public of a recognised hospital  
 an outpatient private of a recognised hospital

Medicare Benefits (Section 20A of the Health Insurance Act 1973). I offer to assign my right to the approved pathology practitioners who will render the requested pathology service(s) and any eligible pathologist determinable service(s) established as necessary by the practitioner.

Do Not send to My Health Record

X \_\_\_\_\_ Patient signature Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Practitioner's Use Only

Privacy Disclosure SAMSAS requires the personal information contained in this request form for the purpose of Risk assessment and Program Audits. SAMSAS may therefore request copies of ultrasound and cytogenetic reports from your doctor in order to complete its testing and audits.

**5-10ml CLOTTED BLOOD SAMPLE** Gel or plain tube - no anticoagulant  
First trimester blood sample 9-14w0d Second trimester blood sample 14w1d-20w6d

I have verified FULL NAME, DOB and URN on the sample label and request form verbally with the patient and/or checking the patient's ID band.

Collector's Signature: \_\_\_\_\_ Specimen Collected: \_\_\_\_/\_\_\_\_/\_\_\_\_ : \_\_\_\_ Hrs

**Requesting Doctor**  SAMSAS risk assessment calculation not required

Name: \_\_\_\_\_ Copy of report to: \_\_\_\_\_  
Provider No: \_\_\_\_\_ Name: \_\_\_\_\_  
Address: \_\_\_\_\_ Address: \_\_\_\_\_  
Tel: \_\_\_\_\_ Fax: \_\_\_\_\_  
Email: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Request Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Deliver to: South Australian Maternal Serum Antenatal Screening (SAMSAS) Program  
SA Pathology, Specimen Reception Area, Level 3, Royal Adelaide Hospital, Port Rd ADELAIDE SA 5000.  
T (08) 8161 7285 F (08) 8161 8085 samsas.program@health.sa.gov.au www.wch.sa.gov.au/samsas.html

Enquiries 8222 3000 [www.sapathology.sa.gov.au](http://www.sapathology.sa.gov.au)

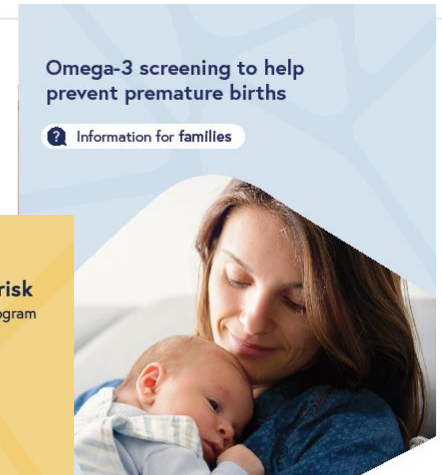
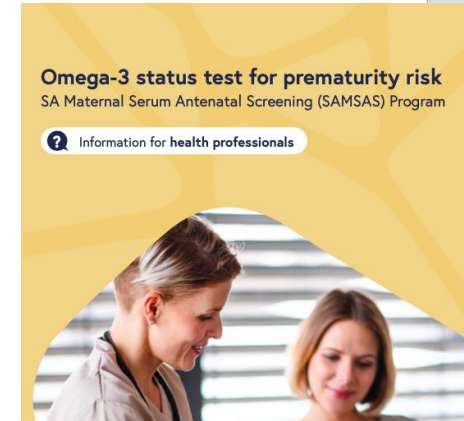
- SA Maternal Serum Antenatal Screening Program covers 80-85% of women in SA with testing before 16 weeks
- No additional blood test
- Ability to order omega-3 test with or without other screening tests
- No cost to the women



# Health Professional and Consumer Reference Groups

## Key learnings:

- Need specific and simple advice
- With enough flexibility for consumer choice (e.g. use of other supplements, vegetarian options)
- Delivery of information is immediate (with SA Path results) and back up information available as needed



# Supplement Advice Based on Omega-3 Status

| Omega-3 Status |                      | Guidance   |
|----------------|----------------------|--|
| Low            | Less than 3.7%       | <b>Take omega-3 fatty acid supplements until 37 weeks to reduce the risk of early preterm birth.</b> <i>Suggested dose: 800 mg DHA and 100 mg EPA per day.</i>   |
| Moderate       | Between 3.7 and 4.3% | <b>No action required.</b> <i>If already taking omega-3 fatty acids as part of a multivitamin and mineral supplement or a standalone supplement, this may continue.</i>  |
| Sufficient     | Above 4.3%           | <b>Omega-3 supplements are not required and provide no benefit to risk of early preterm birth.</b> <i>If women are already taking omega-3 fatty acids as part of a multivitamin and mineral supplement and wish to continue, the dose of DHA+EPA should not exceed 250 mg per day.</i> |



# The Omega-3 Test and Treat Program



- Launched in May 2021 with the release of a new SAMSAS form
- Complemented with email from SA Path Director to their providers, email communication from SA Branch of RANZCOG, short education sessions, especially with share care GPs.
- Went from 0 to about 100 omega-3 tests per week in 12 months
- Struggled to consistently get >100 per week. Aim is  $\approx$ 250 per week

# What Did We Learn In the 18 Months?



- 75% of the omega-3 tests are ordered and managed by GPs
- GPs are time poor and want automated solutions
- SAMSAS form not digitised and many practices have old versions!
- GPs who don't see a lot of pregnant women rely on their GP share care colleagues
- Many obstetricians more worried about higher end care
- Regional areas doing a little better than metro areas

# Where Are We Up To Now?



- More than 8,000 women have engaged with the program
- >110 women tested per week
- About 35% coverage of all pregnant women in SA
- About 15% of women are testing low and need specific omega-3 supplementation
- Metro residing women are more likely to have sufficient omega-3 status compared with women from the regions

# The New “Scale-Up” Phase

- **Target:** Enhance adoption to >80% to achieve effectiveness

## GP Strategies

- Digitisation of the SAMSAS form for easy incorporation into GP Practice software
- New communication package for GPs disseminated by GPEx, SA Health
- Pilot roll-out of an omega-3 supplement incentive in disadvantaged areas to promote equity of access for pregnant women who test low in omega-3
- Plans to take learnings from omega-3 supplement incentive and expand
- Engagement with Aboriginal Health Services

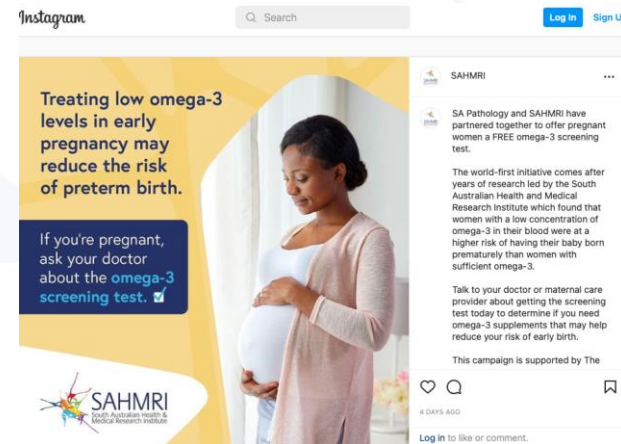
# The New “Scale-Up” Phase

- **Target:** Enhance adoption to >80% to achieve effectiveness

## Strategies for women and their families

- Digital and general media campaign for women

## SOCIAL MEDIA CAMPAIGN



# Revamped Website

# sahmri.org/omega3



**Health Professional  
Hotline**

**0438 273 155**

Home / ... / Women And Kids / Programs / Child Nutrition Research Centre /  
Projects / Omega-3 Test-and-Treat Program

## Omega-3 Test-and-Treat Program

OVERVIEW | PEOPLE



PROJECT STATUS: IN PROGRESS

SA Pathology and SAHMRI are partnering to offer omega-3 testing for women with singleton pregnancies as part of the South Australian Maternal Serum Antenatal Screening (SAMSAS) program.

This will identify women who are low in omega-3 and may benefit from omega-3 supplementation to reduce their risk of early birth.



Information for Families

[Read more >](#)



Information for Health  
Professionals

[Read more >](#)



Additional Resources

[Read more >](#)



# Summary



OMEGA MUM: Mother-to-be Meghan supports fish oil research. Picture: TRICIA WATKINSON

**BRAD CROUCH**  
HEALTH REPORTER

ADELAIDE researchers studying fish oil supplements to prevent preterm births are searching for the "sweet spot" to achieve the best effect for individual women.

Research by the South Australian Health and Medical Research Institute's Women and Kids Theme has proved supplements of omega-3 – found in fish oil – can prevent preterm births.

However, the latest study published today in the New England Journal of Medicine of a trial involving more than 5500 pregnant Australian women found drawbacks with using a universal "one dose fits all" approach.

Lead researcher Dr Karen Best said the latest results indicate the benefits for preventing preterm births might be best achieved through a targeted supplementation strategy.

She said the work is now focusing on developing a simple test to check the level of omega-3 in women, so individuals can know if they need a supplement and also how much they need.

"We are trying to find the sweet spot women need to be at," Dr Best said. "If women are eating fish once or twice a week, or taking a different supplement that contains omega-3, they may not need a supplement at all."

Adelaide mum-to-be Meghan, 28, is 31 weeks pregnant with her first baby and strongly supports the research.

"The work they are doing is fantastic," she said.

- Shown **feasibility** of an omega-3 test-and-treat program embedded in standard antenatal care
- Next steps to enhance adoption
- On-going evaluation to monitor adoption, effectiveness and costs are necessary
- Such data required for expanded implementation and government or health insurance subsidisation to underpin sustainability
- Challenges on the horizon: agreement re what to measure/how to report; national and international for-profit testing providers



## Thanks to the many supporters and collaborators

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 visit [sahmri.org/omega3](https://sahmri.org/omega3)

