OMNI

Outcome Modeling for Nutrition Impact
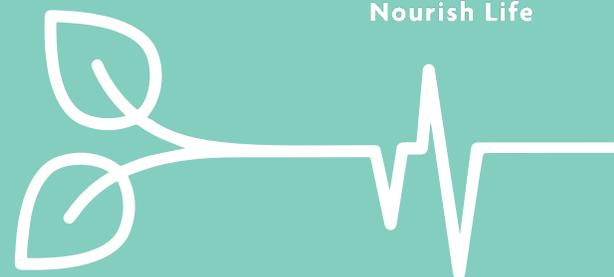
Developed by Nutrition International

Contact:

Homero Martinez (hmartinez@NUTRITIONINTL.ORG)

Web:

https://www.nutritionintl.org/knowledge-centre/omni/

NUTRITION INTERNATIONAL

Nourish Life

Summary

OMNI is a tool developed to estimate nutrition and non-health (such as IQ, years of education, future earnings) impacts due to nutrition interventions, and empower decision-makers to maximize future program impact as a result of specific program investment(s).

Key Questions Addressed

Nutrition International developed the Outcome Modeling for Nutrition Impact (OMNI) tool to answer the question: 'What is the maximum impact that we can achieve through our combined interventions?" OMNI answers this by sequentially using peer-reviewed evidence, programming coverage data, and implementation experience to model the potential of high-impact nutrition programs. OMNI balances impact with cost; leveraging high-burden geographies with select high-impact and cost-effective nutrition interventions to maximize benefit. The tool includes a variety of impacts including: child deaths averted, anaemia in different age groups, low birth weight, stunting, neural tube defects, and mental impairments.

Figure 1: Example Impact Pathway for iron and folic acid supplementation and fortification
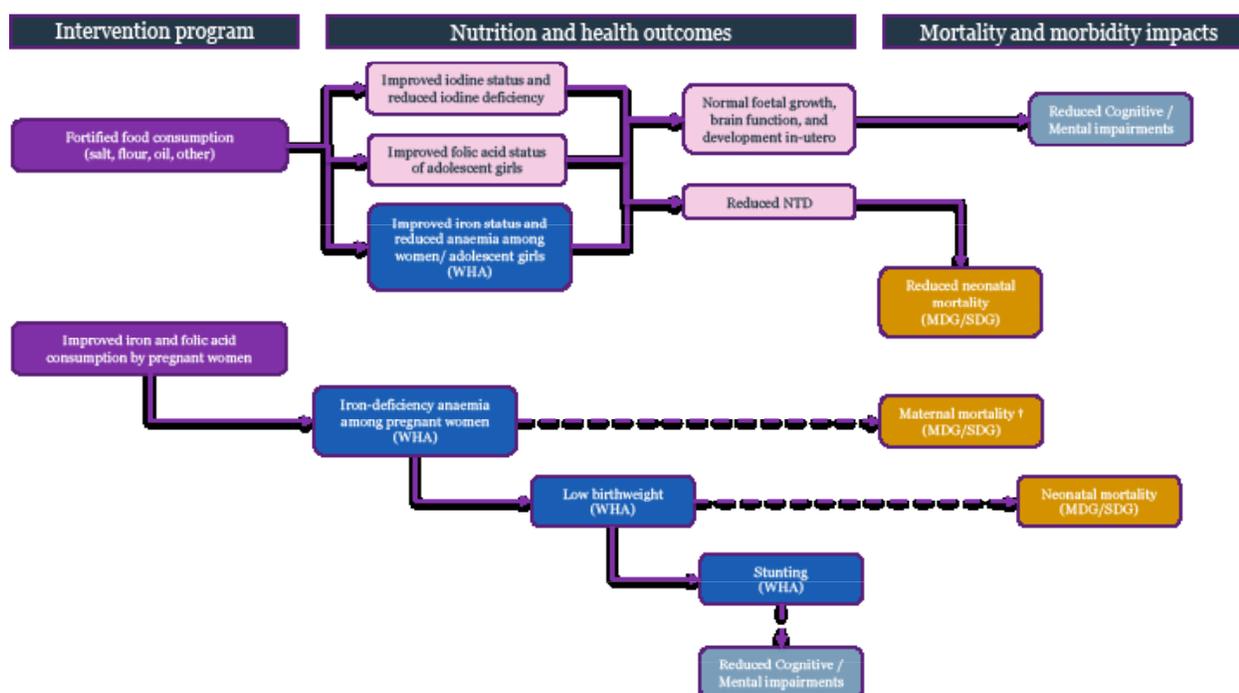
How does this help nutrition decision making?

Modeling program impacts that have been built on evidence – experience, literature, and research – allows NI and partners to estimate impact results for current or proposed project activities with transpar-ency and reasonable certainty. Further, the OMNI tool allows end-users to understand the context in which health impacts could be further maximized; and, the results program efforts (could) have on addressing the burden of malnutrition. This enables comparison of various resource allocation scenarios making a compelling case for specific intervention(s) to a do-nor, government minister, program manager or other key stakeholder.

What are the data needs?

OMNI differentiates between program targets and incremental coverage provided by the intervention; allowing for a clearer picture of the resulting impact. The data required includes change in program coverage, as well as demographic and burden e stimates (specific to beneficiary group especially if sub-national). OMNI is prepopulated with the most relevant and acceptable intervention effect sizes, national-level coverage and burden of relevant indicators from in-house sources. Program-specific coverage and interpolated future change coverage data are required for prospective modeling.

How long does it take?

Impact estimates are calculated in real time assuming data is readily available. Prospective modeling may require more time, as key informants must adjust the model to optimize programming scenarios. Currently, the team is working on designing a trainer/ user manual, a user-friendly interface, and other materials to facilitate its use.

Strengths and limitations?

Strengths:

- OMNI can easily be customized to suit diverse programming, multiple outcomes of interest, is built to estimate additional impact, but does not doublecount impacts where concurrent interventions have potential to overlap.

- OMNI can be used to report on year-end impact results, in addition to project planning driven by either impact targets or restricted funding.

- Regularly reviewed, updated, and expanded upon to remain relevant.

- End users are able to customize the tool to suit their needs should they have access to more context-specific estimates.

- OMNI's power and simplicity is exemplified in its ability to work prospectively; applying evidence and potential program coverage to estimate future impact.

- OMNI creates simple summary tables for advocacy.

Limitations:

- It uses systematic reviews to estimate the average impact. While the effect of an intervention is observed in one context, it may not be the same in other.

- OMNI currently includes a limited set of interventions, based on availability of impact causeways, size of intervention effects etc.

- OMNI does not account for other contextual factors which may contribute to an observed change in the population, and assumes factors remain unchanged in a given year.

- OMNI does not automate the creation of prospective program scenarios; it is constructed to facilitate decisionmaking by informed and key stake-holders.

- Future impact estimates require that key informants are knowledgeable about program delivery and scope for improvement to input determine targets.

- Current version is being updated to include non-health impact like IQ, years of education, and estimated future earnings

NMC
NUTRITION MODELING CONSORTIUM