

# [Categories of nutrition indicators](https://assignbuster.com/categories-of-nutrition-indicators/)

[Nutrition](https://assignbuster.com/essay-subjects/nutrition/)

Can you give us examples of appropriate nutrition related indicators for each objective (SO), for each intermediate result (IR) or outcome, and for each sub IR or outcome? You may refer to the list of indicators on the handout provided.

EXAMPLES: SO= weight-for-age (underweight) for children under age three year, weight for height (stunting) of children under age five years, and body mass index (BMI) of women 15-49 yrs.

IR-1: coverage of nutrition actions in ANC for pregnant women and nutrition actions in immunization programs for children 12-23 months (see supplemental slide) – % of children aged 6-59 months of age who received a high dose of vitamin A in the last 6 months in immunization services – % of women who receive who receive two high dose supplements of vitamin A within six weeks of giving birth – % of pregnant women who received the recommended number of iron folate supplements during pregnancy.

IR-2: Indicators measuring whether community health workers demonstrate knowledge and skills of nutrition actions (e. g. age and dose of vitamin A, iron folic acid, breastfeeding assessment and counseling) and make at least monthly contact with families of pregnant women and children under two years.

IR-3: Indicators measuring whether a nurse from nearby health facility trains and supervises community workers, provides them supplies of iron folic acid, and assists families having difficulties with infant feeding or growth faltering; doctor in charge routinely checks monitoring data on vitamin A and iron folic acid coverage, and growth monitoring.

## Categories of Nutrition Indicators

* Nutritional status.
* Breastfeeding practices.
* Complementary feeding practices.
* Micronutrient supplements/fortified foods.
* Household food security, vulnerability to food and nutrition insecurity.

Example: Nutritional status/anthropometry or breastfeeding practices. All five groups, including the food security and vulnerability indicators are needed for monitoring and evaluating national-level nutrition programs.

Most Common Indicators:

### Nutritional status –

* Weight-for-age and/or height-for-age.
* Body Mass Index in women.
* Anemia prevalence.
* Vitamin A deficiency.

## Infant and young child feeding practices –

* Timely initiation of breastfeeding.
* Exclusive breastfeeding rate.
* Complementary feeding rate.
* Extra feeding for malnourished/recently sick children.

Most Common Indicators:

## Micronutrient Interventions

* Vitamin A supplementation.
* Iron supplementation.
* Coverage with iodized salt, other fortified foods.

## Household Food Security/Vulnerability

* Daily meal frequency of family/individuals.
* Perceived inadequacy of food reserves in the home/community.

Data Collection Systems:

## Routine

* Sentinel food and nutrition surveillance.
* Institutional health records- clinics, schools.
* Feeding & cash or food transfer programs records- daily/weekly/monthly attendance.

## Non-routine

* Population-based surveys.
* Emergency appraisals, rapid assessments.
* Experimental and operational research.

Non-routine data sources include population-based surveys such as the demographic and health surveys and multiple indicator cluster surveys, emergency appraisals rapid assessments experimental designs of efficacy of alternative treatments/delivery channels/processes; and disaster early warning systems.

Class Activity:

Ask participants – What data sources do nutrition program use in your own country (CRS growth surveillance program; CARE food security information system). Anthropometric Measures (a):

## Children

* Weight-for-age (underweight)
* Reflects chronic or acute malnutrition or both.
* Height-for-age (stunting
* Reflect chronic (prolonged, cumulative) malnutrition.
* Weight-for-height (wasting)
* Reflects acute and recent malnutrition.

## Class activity:

Are there certain age groups where any of these indices might be most sensitive to changes in program effectiveness? (Answers: Underweight rises quickly between 6-18 months and peaks in the under two’s or three’s. Wasting peaks between ages 12-23 months).

Anthropometric Measurements (b):

### Adults

* Body Mass Index (BMI)
* Low weight-for-height (kg/m2) reflects chronic &/or acute.
* Mid-upper arm circumference (MUAC)
* Thin reflects chronic &/or acute.

What is measured MUAC is correlated with pre-pregnancy weight and is useful for identifying women at risk of intra-uterine growth retardation, especially where scales are not available.

## Class activity

Are there certain age groups where any of these indices might be most sensitive to changes in program effectiveness (Answer: MUAC is smaller for women 15-19 than women 40-49, most sensitive age group for detecting intervention effects is likely to be 20-39 years)

### Coverage Indicators for Micronutrient Programs

Proportion of children aged 6-59 months who received a high dose of vitamin A in the last 6 months.

Proportion of households consuming adequately iodized (i. e. 15+ ppm of iodine) salt.

Proportion of pregnant women who received the recommended number of iron/folate supplements during pregnancy.

In this slide we present some of the indicators used to measure coverage of micronutrient programs. One of the indicators used to measure vitamin A supplementation coverage is the proportion of children aged 6-59 months who received high-dose of vitamin A in the last 6 months.

The UNICEF-recommended indicator used to measure coverage of iodized salt is the proportion of households consuming adequately iodized salt. One of the indicators used to measure iron supplementation coverage is the proportion of pregnant women who received the recommended number of iron/folate supplements during pregnancy.

Class activity: What are the considerations in measuring the vitamin A supplementation indicator

Defining what is a high dose supplement as this varies with the age of the child. Children 0-5 months of age are expected to receive 150, 000 international units (IU) as three doses of 50, 000 IU with at least a one month interval between doses. Children aged 5-11 months are expected to receive 100, 000 IU as a single dose every 6 months. Children aged 12 months and older are expected to receive 200, 000 IU as a single dose every 6 months according to the Annecy accord recommendations.

Many programs record Vitamin A in their immunization registers or with growth monitoring data. If this indicator is added to an immunization coverage survey or an immunization tally sheet or register hen the age group for the indicator can be 12-23 months. However the results will not show whether older children in the 24-59 month age group are receiving vitamin A or not.

Using this indicator alone misses out two other components of a vitamin A supplementation program. What are they and how can they be included in M and E plans (Answer: Postpartum supplements for women can be measured from postpartum care registers/cards, and disease-targeted or therapeutic vitamin A from case management records/registers).

### Examples of Flaws in Nutrition Evaluations

* No comparison groups.
* No pretest or baseline.
* No control for age, e. g. < 6 mo., < 2 and 3+ yrs.
* Not accounting for confounding factors.
* Seasons not comparable.
* Not controlling for mortality reduction.
* Non-representative samples, small samples.
* Pilot projects, not replicable.

## Class activity

How can these problems be addressed in an evaluation plan (Answer: whenever possible try to create a control group. When random assignment is not possible try to find a comparison group that is as similar as possible to your intervention group. If you cannot use a time series design, at least try to obtain baseline or pretest information before a program starts. If baseline or pretest information is unavailable you should consider using multivariate analytic techniques. Always keep in mind the issue of validity. Are there threats to validity history, selectivity, maturation, mortality or instrumentation) that might explain the results.

## Economic Analysis in Nutrition M&E:

Cost-effectiveness analysis

Compares two or more alternatives for achieving coverage or scale or behavior change, or a process outcome such as training to build capacity

* Answers the question ‘ which is the more efficient option?’
* Used more in evaluations
* Cost-benefit
* Compares the resources required to achieve impact and the monetary value of that impact.
* Answers the question ‘ is the investment worthwhile.
* Based on many assumptions with limited empirical evidence.

## Class activity:

When is it useful to include cost considerations in an M and E plan give examples of situations where cost information was useful or can be useful?

Nutrition programs are increasingly including some type of economic analysis in their monitoring and evaluation activities. In this slide we present two approaches to the economic evaluation of nutrition programs.

### Answers the question:

Which is the more efficient option? Cost effectiveness analysis is used more in evaluations than cost benefit analysis. Cost benefit analysis compares the resources required to achieve impact and the monetary value of that impact. It answers the question: is the investment worthwhile Cost benefit analysis is based on many assumptions, often with limited empirical evidence.

There is high prevalence of malnutrition among children in rural communities which is often underestimated for the fact that rural dwellers of Kano are mostly farmers and that they are adequate to provide for their children. Frequency of illnesses among the children of rural dwellers is associated with the nutritional status of the children.

The results of this paper strongly highlight the necessity of increasing parents’ education level, improving the mother’s nutritional status, and increasing antenatal care service facilities during pregnancy in order to achieve better nutritional status among under-ﬁve children of Rohingya Refugees in Bangladesh.