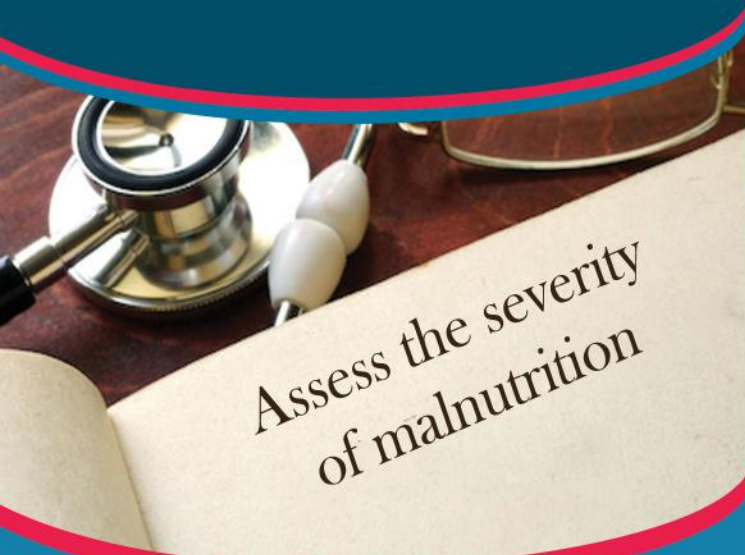




Assess the severity of malnutrition



Also, non-nutritional factors (eg, cardiovascular disease) and other inflammatory diseases (eg, infections) can affect the level of C-reactive protein (CRP). Total white blood cell count (TLC) is another serum marker that is useful for determining nutritional status.

➤ Nitrogen balance

The best standard for evaluating protein intake is nitrogen balance. Negative nitrogen balance means that the amount of nitrogen excreted is greater than the amount consumed, which can be used as an indicator of malnutrition.

Nitrogen balance can be measured by the concentration of urea in the urine. Calculation of urinary creatinine / height index is also used to determine nitrogen balance.

➤ Nutritional assessment

➤ Individual Global Assessment (SGA)

SGA is a very valid tool to assess malnutrition, especially in hospitalized patients, and includes several physical examination assessments such as muscle loss and subcutaneous fat loss.

➤ Evaluation of muscle mass and subcutaneous fat

Decreased subcutaneous fat and overall muscle mass are significant indicators of malnutrition.

Evaluation of muscle mass and subcutaneous adipose tissue and non-invasive tests to



assess nutritional status have also been reported.

➤ The power to hold hands

Malnutrition is also associated with decreased muscle strength and overall function. In general, these processes lead to the destruction of muscle mass. Hence, decreased muscle strength is strongly associated with loss of functional status.

➤ Guidelines

At least two of the six characteristics are required to diagnose malnutrition. If two or more features of malnutrition are identified, malnutrition can be classified first based on severity of the condition and then on how fast it is occurred. For example, weight loss of more than 2% per week is classified as severe acute malnutrition, while weight loss of 1-2% per week is considered moderate severity.



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However, as there are many disease processes that alter albumin levels, it becomes an unreliable serum marker for malnutrition. All in all, albumin can not be reliably used as a marker for the diagnosis of malnutrition.

➤ **Introduction**

➤ **Prealbumin, transferrin and retinol-bound proteins**

Transferrin is a serum protein and is involved



increase due to increased iron absorption. As a result, transferrin levels are reduced in cases of iron overload, so transferrin cannot be used as an effective marker in determining malnutrition. High albumin is a better indicator than albumin to assess the adequacy of postoperative nutritional support. It is found that high albumin levels were returned to normal rapidly after albumin feeding compared to albumin.

➤ **Other serum markers**

One of these molecules is C-reactive protein (CRP).

in iron transport. In cases of iron deficiency (including anemia due to chronic blood loss), transferrin levels

Malnutrition with an approximate prevalence of 30-50% is a significant economic challenge in today's healthcare landscape. The prevalence of malnutrition in long-term care centers may be as high as 85%. However, due to historical inconsistencies in the definition and identification of malnutrition, the true prevalence in the population is unknown.

➤ **Laboratory / serum markers**

➤ **Albumin**

Physicians often rely on albumin levels to assess a patient's nutritional status. Also, there is some conflicting evidence that measuring albumin levels may be a useful tool for diagnosing malnutrition, especially in heart transplant patients and orthopedic patients.