

containing only the 8 essential amino acids were given for a 22- to 40-day period, the levels of glutamic acid and glutamine, in addition to histidine, were greatly reduced in both plasma and muscle. It is possible that glutamic acid may be specifically required under the conditions of the diet. Alternatively, any non-specific nitrogen source may have served to increase the glutamic acid levels and promote nitrogen balance.

In summary, there is substantial evidence that food proteins can be supplemented with non-specific nitrogen without loss of nutritive value. However, the extent of this supplementation has not been established with certainty although some investigators propose that the E/T<sub>n</sub> ratio can be reduced by approximately one-half on the basis of short-term nitrogen balance studies. Further studies should use as a basal dietary intake adequate but minimal quantities of the 8 essential amino acids plus histidine. It should be recognized also that the minimum safe dietary E/T<sub>n</sub> ratio might vary with the composition of the non-specific nitrogen component, the route of administration, or the physiological or clinical status of the subject. Liver disease, kidney disease or some other organ disfunction may mediate alterations in the ratio. Moreover, age and sex might have an influence and possibly the rate of protein synthesis. It may be that under conditions of protein repletion the E/T<sub>n</sub> ratio is different than in the state of nitrogen equilibrium. This would have particular relevance for the sick patient. In future studies of the E/T<sub>n</sub> ratio it would seem advisable to extend short-term nitrogen balance studies and include the measurement of other parameters such as plasma and tissue amino acid levels.

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## Buchbesprechung

### Interne Intensivmedizin

Methodik, Pathophysiologie, Klinik, Ergebnisse  
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Georg Thieme Verlag, Stuttgart 1975  
445 Seiten, 61 Abbildungen, 109 Tabellen, DM 69,-

Das Buch befaßt sich mit dem Bau und der Organisation einer Intensiv-Pflegestation. Es werden die Elektro-Therapie, die künstliche Ernährung, die klinisch-chemische Diagnostik und Infektionen als Komplikationen der Intensivmedizin besprochen. Von den internmedizinischen Krankheitsbildern einer Intensiv-Station werden der Herzinfarkt, der akute Kreislaufstillstand, der Schock, die Herzinsuffizienz, Arrhythmien, die akute respiratorische Insuffizienz,

Störungen des Wasserelektrolyt-Säure-Basen-Haushaltes, das Koma, Gerinnungsstörungen und thromboembolische Erkrankungen, das akute Abdomen und gastrointestinale Blutungen sowie das akute Nierenversagen dargestellt. Im letzten Kapitel werden die wichtigsten Vergiftungen besprochen.

Alle Buchkapitel sind übersichtlich abgefaßt. Sie beschränken sich auf das Notwendige der Intensivmedizin. Sehr übersichtlich sind die Schemen zur Pathophysiologie, die Tabellen und Abbildungen. Dem praktisch arbeitenden Arzt auf einer Intensiv-Pflegestation wird das Buch eine wertvolle Hilfe sein für dringende und rasche Informationen.

Prof. Dr. J. PAPPENBERG, Heidelberg