

Klinička prehrane kod ciroze jetre

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Ciroza jetre



Ascites

Kolateralna venska cirkulacija

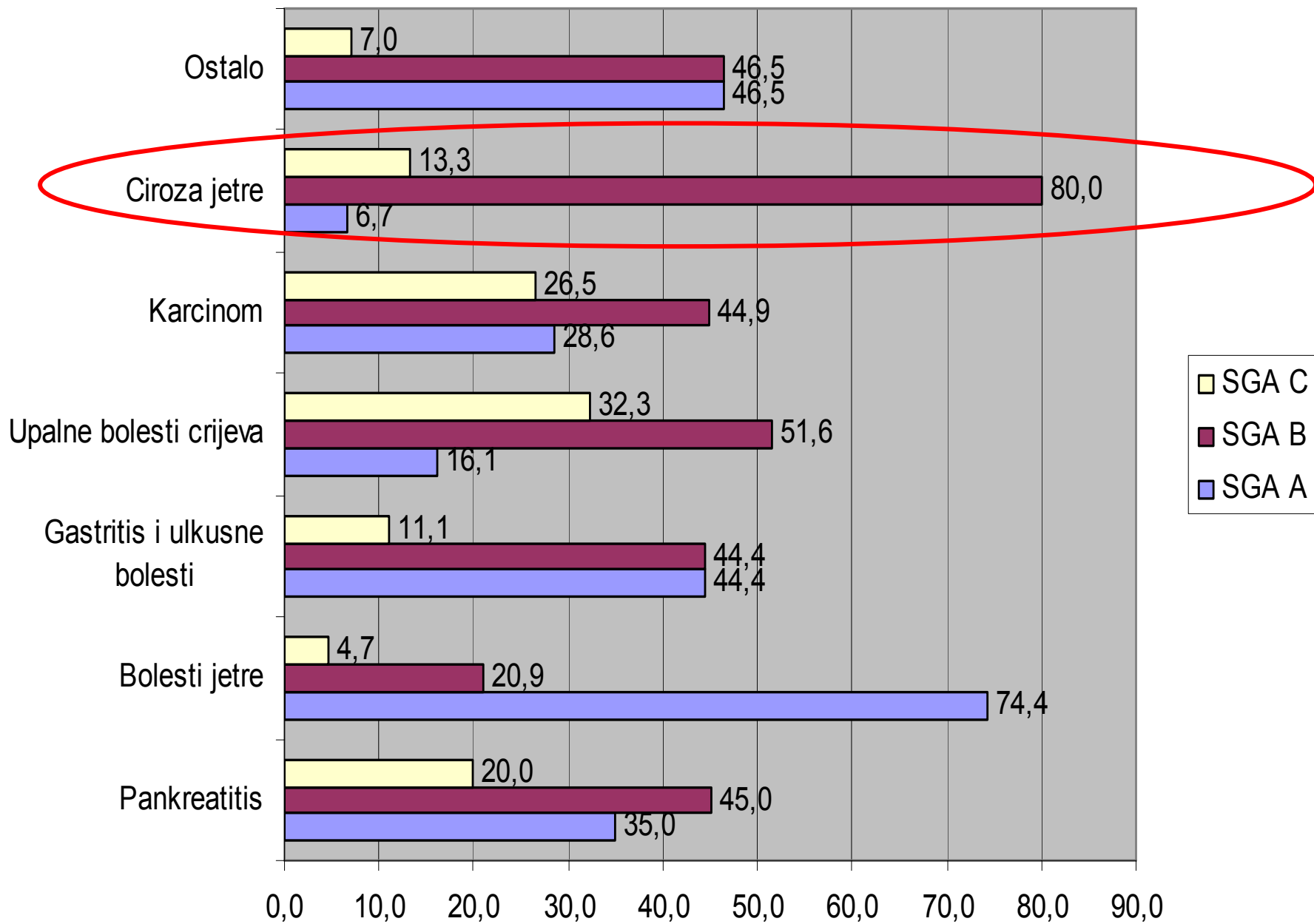
Umbilikalna hernija

Skrotalni edem

Atrofija mišića

Manjak subkutanog masnog tkiva

Dijagnoza

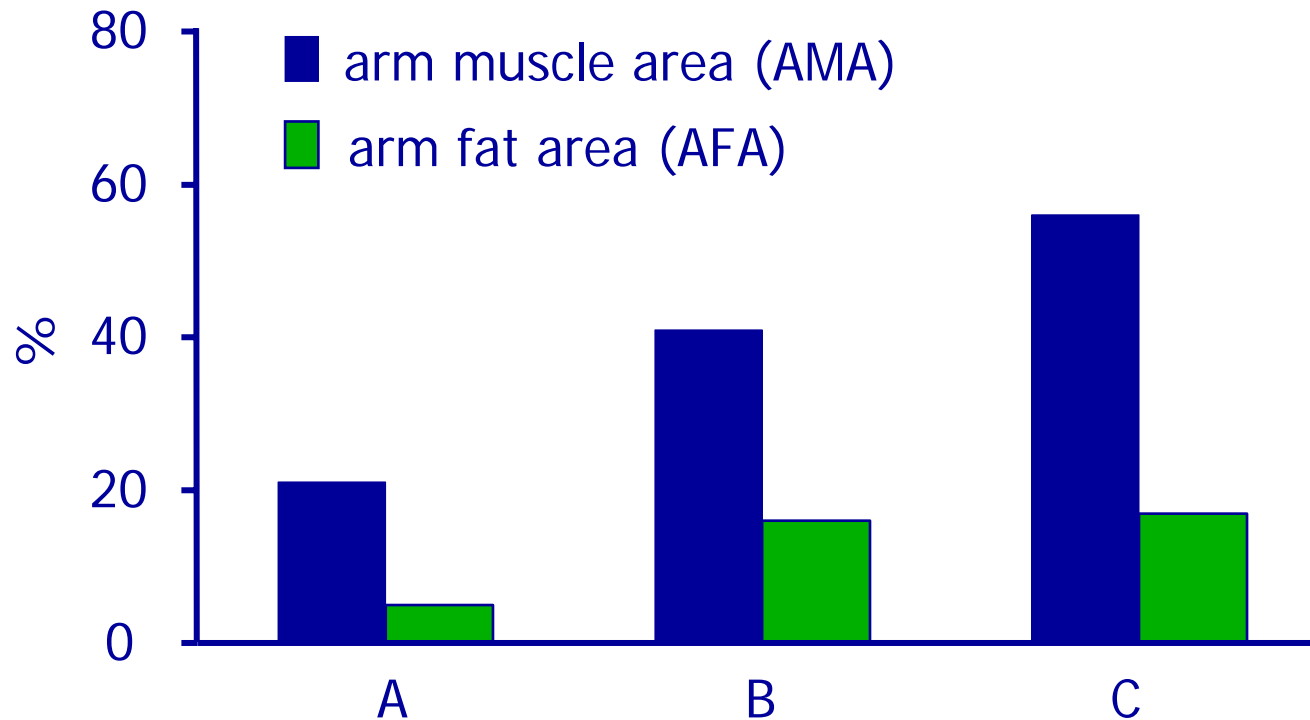


Vranešić & Krznarić 2005.

Relativna frekvencija (rf (%))

Pothranjenost i ciroza jetre

Prevalencija

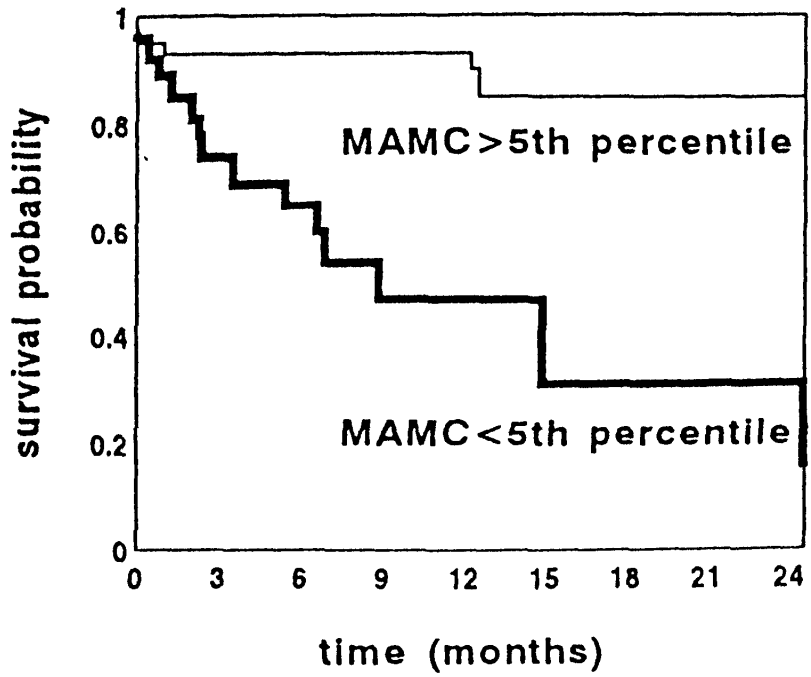


percentage of male patients in Child-Pugh classes A, B, or C with arm muscle area (AMA) or arm fat area (AFA) below the 5th centile

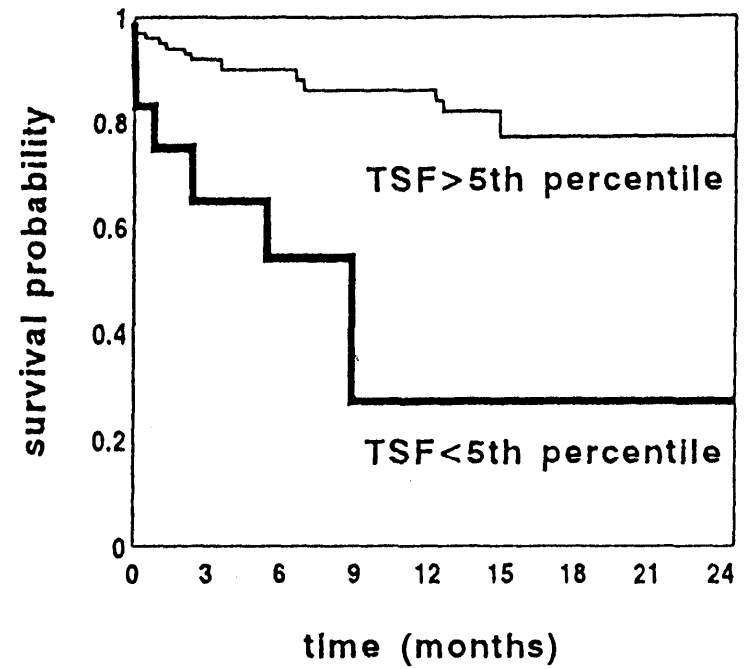
Pothranjenost i ciroza jetre

Prognostički čimbenici

midarm muscle circumference



triceps skinfold thickness



CONSENSUS STATEMENT

ESPEN guidelines for nutrition in liver disease and transplantation

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Table Nutrition in chronic liver disease – recommendations of the 1997 ESPEN consensus group

Clinical condition	Non-protein energy kcal·kg ⁻¹ ·d ⁻¹	Protein or amino acids g·kg ⁻¹ ·d ⁻¹
Compensated cirrhosis	25–35	1.0–1.2
Complications		
Inadequate intake	35–40	1.5
Malnutrition		
Encephalopathy I–II	25–35	Transiently 0.5, then 1.0–1.5 if protein intolerant: vegetable protein or BCAA supplement
Encephalopathy III–IV	25–35	0.5–1.2 BCAA-enriched amino-acid solution

Generally, the oral or enteral routes are preferred.

Parenteral nutrition should only be used when enteral feeding is not possible or impracticable. For parenteral nutrition energy should be provided by glucose and fat with fat constituting 35–50% of non-protein calories. Nitrogen should be provided using conventional amino acid solutions unless indicated otherwise. For calculations ideal body weight should be used.

<http://www.espen.org/documents/Liver.pdf>

Prehrana u cirozi jetre

UK survey, 1064 patients
64 hepatology / GI hospital departments

<i>Diets prescribed</i>	<i>Physicians</i>	<i>Dietitians</i>
no protein restriction	27%	42%
restriction 30-50 g/d	40%	48%
≤ 30 g/d	33%	10%

Protein restriction instituted in 44% of departments surveyed merely for HE prophylaxis despite no episodes of HE



ESPEN GUIDELINES

ESPEN Guidelines on Enteral Nutrition: Liver disease [☆]

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KEYWORDS

Guideline;
Clinical practice;
Evidence-based;
Enteral nutrition;
Oral nutritional
supplements;
Tube feeding;
Liver cirrhosis;
ASH;
NASH;
Acute liver failure;

Summary Enteral nutrition (EN) by means of oral nutritional supplements (ONS) and tube feeding (TF) offers the possibility to increase or to insure nutrient intake in case of insufficient oral food intake.

The present guideline is intended to give evidence-based recommendations for the use of ONS and TF in patients with liver disease (LD). It was developed by an interdisciplinary expert group in accordance with officially accepted standards and is based on all relevant publications since 1985. The guideline was discussed and accepted in a consensus conference.

EN by means of ONS is recommended for patients with chronic LD in whom undernutrition is very common. ONS improve nutritional status and survival in severely malnourished patients with alcoholic hepatitis. In patients with cirrhosis, TF improves nutritional status and liver function, reduces the rate of complications and prolongs survival. TF commenced early after liver transplantation can reduce

Grade A.

- Meta-analysis of randomized controlled trials or at least one randomized controlled trial

Grade A.

1. EN kao **dodatak prehrani** u bolesnika koji ne mogu zadovoljiti energetske potrebe unosom uobičajene hrane
2. **NGS** (čak i kada su prisutni varikoziteti jednjaka)
3. EN koja sadrži **BCAA** u bolesnika sa encefalopatijom nastalom tijekom AN
4. **EN popravlja nutritivni status i funkciju jetre, smanjuje stopu komplikacija i poboljšava preživljenje**



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ESPEN Guidelines on Parenteral Nutrition: Hepatology

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SUMMARY

Parenteral nutrition (PN) offers the possibility to increase or to ensure nutrient intake in patients, in whom sufficient nutrition by oral or enteral alone is insufficient or impossible. Complementary to the ESPEN guideline on enteral nutrition of liver disease (LD) patients the present guideline is intended to give evidence-based recommendations for the use of PN in LD. For this purpose three paradigm conditions of LD were chosen: alcoholic steatohepatitis (ASH), liver cirrhosis and acute liver failure. The guideline was developed by an interdisciplinary expert group in accordance with officially accepted standards and is based on all relevant publications since 1985. The guideline was presented on the ESPEN website and visitors' criticism and suggestions were welcome and included in the final revision. PN improves nutritional state and liver function in malnourished patients with ASH. PN is safe and improves mental state in patients with cirrhosis and severe HE. Perioperative (including liver transplantation) PN is safe and reduces the rate of complications. In acute liver failure PN is a safe second-line option to adequately feed patients in whom enteral nutrition is insufficient or impossible.

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Grade A.

1. PN se uvodi odmah u **pothranjenih bolesnika** koji ne mogu uzimati hranu ili EN
2. **Rana postoperativna PN** u bolesnika koji ne mogu uzimati hranu ili EN
3. U encefalopatiji III i IV stupnja koristiti **PN bogatu BCAA te sa smanjenim unosom AAA** (metionina i triptofana)
4. **Hipoglikemija!**

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**NUTRICIONIZAM
SCIENCE OF NUTRITION**

**GOŠČA UREDNICA
DARIJA VRANEŠIĆ BENDER**



Dijetoterapija bolesti jetre

Nutrition in Liver Disease

Irena Martinis, Eva Pavić, Irena Oreč, Duško Kardum

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