| Author, Year<br>Country<br>Study Design<br>Sample Size         | Study Characteristics   | Results  |
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| (Wang et al., 2017)<br>China<br>Observational<br>N=45          | Population: Time since injury: <1 yr=22, 1-5 yr=23; Level of injury: paraplegia=40, tetraplegia=5; Severity of injury: AIS A=29, AIS B/C=7, AIS D=9; Gender by Age Groups: 1) Males 0-5 yr=7, 2) Males 6-12 yr=5, 3) Females 0-5 yr=24, Females 6-12 yr=4) 9. Intervention: None. Measurements and survey.  Outcome Measures: Height, heightfor-age (HAZ), weight, weight-for-age (WAZ), body mass index (BAZ), appetite level (% of meals eaten), Screening Tool for the Assessment of Malnutrition in Pediatrics (STAMP). | <ol> <li>Mean WAZ, HAZ and BAZ values and STAMP scores were not significantly different among the different gender and age groups.</li> <li>Using STAMP, 22 (48.9%) children were classified as low risk (STAMP: 0–1), 18 (40.0%) were classified as medium risk (STAMP: 2–3) and 5 (11.1%) were classified as high risk (STAMP: 4–5); there were no motor score differences among these three groups of children.</li> <li>The mean WAZ, HAZ and BAZ values and appetite levels were significantly different between the low, moderate and high-risk STAMP groups; values decreased with increasing degree of malnutrition risk (p&lt;0.001 for all).</li> <li>STAMP scores also showed a significant negative correlation with WAZ, HAZ and BAZ levels in regression analysis (p&lt;0.001 for all).</li> <li>There were no significant differences in gender, age, cause of injury, time since SCI, level of injury, completeness of injury, AIS category and walking ability between those with risk or no risk of malnutrition.</li> <li>A total of 20 patients (44.4%) were found to have a normal status, 12 (26.7%) were found to have mild undernutrition, 3 (6.7%) showed moderate undernutrition, 6 (13.3%) were overweight and 4 (8.9%) were obese.</li> <li>The agreement between the nutrition status and malnutrition risk was moderate (k=0.603).</li> </ol>  |
| (Wong et al., 2011)<br>United Kingdom<br>Observational<br>N=62 | Population: Median age: 13 (1-18) yr; Gender: males=37, females=25; Mean time since injury=4 yr; Level of injury: tetraplegia=27 (13 complete, AIS A), paraplegia=31 (18 complete AIS A). Intervention: None. Measurements and survey.  Outcome Measures: Height, weight, body mass index, biochemistry, Screening Tool for the Assessment of Malnutrition in Pediatrics (STAMP).   | <ol> <li>There were no significant differences between genders on anthropometric, biochemical or nutritional indices, apart from a higher concentration of serum creatinine in the boys (p&lt;0.05).</li> <li>In total, 47.1% (24/51) of children screened with STAMP were found to be nutritionally at risk and 23.5% (12/51) were at 'high risk'.</li> <li>Comparing well-nourished and undernourished patients via STAMP, those at risk of under-nutrition were found to receive more medications p=0.048); no other relationships were uncovered.</li> <li>Undernourished patients with paraplegia were found had lower height centile than well-nourished patients with paraplegia (p&lt;0.05)</li> <li>Of the 51 screened patients, 15 (29.4%) were deemed to be at risk of under-nutrition after assessment by dietitian.</li> <li>When comparing the well-nourished and undernourished patients, as identified by the dietitian's assessments, undernourished patients were found to have statistically significant lower BMIs and BMI centiles (p=0.041), less appetite (p=0.01), higher Creactive protein (p=0.029) and received more prescribed medications (p=0.017).</li> <li>Undernourished patients determined by STAMP were more likely to have had a past need for artificial nutritional support (p=0.01).</li> <li>Undernourished patients determined by a dietician experienced more previous intensive</li> </ol> |

|  | care (p<0.05), mechanical ventilation (p<0.01), and to have had a past need for artificial nutritional support (p<0.01).  9. Malnutrition risk was common in new admissions than in those with chronic SCI (readmissions) (p=0.034). |
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