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Pro-eating disorder websites: Knowns and unknowns

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Objectives: Transitional aged youths (TAYs, 15-25 years old) who suffer from self-injury issues such as eating disorder often make use of the internet. The purpose of this presentation was to review the nature and scope of pro-eating disorder (proED) websites and to describe research informed clinical guidelines on how to approach TAY's online proED activities.

Methods: A PubMed search was conducted for articles printed between 1991 and 2018, in english, using the following terms (in various combinations): "eating disorder," "proeating disorder," "pro-ana," "pro-anorexia," "pro-mia," "pro-bulimia," "social media," "social network," "internet," "adolescents," "young adults," and "youth."

Results: ProED messages are no longer limited to websites that can be easily monitored, but instead have been transplanted to more volatile and constantly changing media such as snapchat, twitter, facebook, instagram, tumblr and many others. While these websites tend to be perceived as supportive by users, they instead appear to exert negative influences: normalizing and reinforcing disordered eating, discouraging disclosure, and preventing help-seeking and recovery. A number of recommendations are proposed for clinicians who work with TAYs who're involved in online proED activities.

Conclusions: Although there may be some perceived benefits associated with online proED activities, there are a number of risks meriting the attention of mental health professionals who work with young people who suffer from disordered eating. Due to the nature of these risks, mental health professionals need to know about the associated risks and how to effectively address young people's online activities.

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Evaluation of nutritional composition of Nepalese finger millet (*Eleusine coracana*)

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The present study was carried out to study the proximate composition, micro-nutrients and changes in anti-nutritional factors after germination of six different Nepalese finger millet varieties (Dalle, Kabre, Okhale, GPU-0025, GE-5016 and GE-0116) which were collected from "National Hill Crop Research (NHCR) Center", Dolakha Kabre. Out of this six varieties, three (i.e. Dalle, Kabre and Okhale) were natural varieties while other three (i.e. GPU-0025, GE-5016 and GE-0116) were tube varieties. Germination of millet seeds was carried out at $28 \pm 2^\circ\text{C}$ for three days and changes in its anti-nutritional contents (phytic acid, total polyphenols, tannins, total flavonoids and total oxalates) and reducing sugar content were analyzed. The protein, crude fat, crude fiber, total ash and moisture content of all six varieties were found to be in the range of 6.8-7.3%, 1.3-1.7%, 2.8-3.3%, 1.9-2.2% and 13.2-14.5% on dry basis respectively. Starch content ranged from 59.8-60.3% dry basis on an average for all six varieties. Mineral such as calcium, phosphorus, iron, zinc, sodium and potassium were determined. In these different varieties, calcium content was found in the range of 300-400 mg/100g, phosphorus 230-285 mg/100g, iron 4-7.3 mg/100g, zinc 1.7-2.7 mg/100g, sodium 0.6-0.95 mg/100g and potassium 620-1140 mg/100g. Germination of millet seeds for three days significantly decreased all anti-nutritional factors except for tannin. Phytic acid content ranged from 520-615 mg/100g dry matter before germination which reduced to 140-230 mg/100g dry matter after germination, total oxalates ranged from 20.5-22.84 mg/100g dry matter which reduced to 9.4-11.8 mg/100g dry matter after germination, total polyphenols ranged from 334-377 mg/100g dry matter which reduced to 130-179 mg/100g dry matter after germination and total flavonoids ranged from 93-144 mg/100g dry matter which reduced to 81-113 mg/100g dry matter on germination. While tannin contents increased after germination 285-394 mg/100g dry matter from 212-322 mg/100g dry matter and reducing sugar increased by 13-15 fold. The study showed that the germination of grain significantly reduced the anti-nutritional content of the grain except for tannins thereby increasing the bio-accessibility of minerals in diet.

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