

# EXEMPLAR OF EVIDENCE-BASED CARE IN PRACTICE

## Eating As Treatment (EAT): a health behaviour change intervention provided with dietitians to improve nutrition in patients with head and neck cancer undergoing radiation therapy.

<p><b>WHAT</b> did the initiative involve?</p>	<p>The trial aimed to improve nutritional status during radiation therapy (RT) using a novel method of training dietitians to deliver psychological techniques to improve nutritional behaviours in patients with Head and Neck Cancer (HNC).</p> <p>The EAT intervention was based on motivational interviewing and cognitive behavioural therapy and designed to be delivered by oncology dietitians. Using a stepped-wedge randomized controlled trial design, dietitians provided treatment as usual, before being trained in EAT and moving into the intervention phase. The training was principles based and sought to improve behaviour-change skills rather than provide specific scripts.</p> <p>Patients were assessed at 4 time points (the first and the final weeks of RT, and 4 and 12 weeks afterward). The primary outcome was nutritional status at the end of RT as measured by the Patient-Generated Subjective Global Assessment.</p> <p>Secondary analyses of survival benefit on an intention-to-treat basis were performed.</p>
<p><b>WHO</b> was involved in the initiative?</p>	<p>Oncology dietitians.</p>
<p><b>WHERE</b> did the initiative occur?</p>	<p>Radiotherapy outpatient setting, Australia.</p>
<p><b>WHO</b> was the target of the initiative?</p>	<p>Adult patients (<math>\geq 18</math> years) with head and neck cancer undergoing radiation therapy.</p>
<p><b>WHEN</b> was the initiative undertaken?</p>	<p>During and after treatment July 2013 to January 2016</p>
<p><b>HOW</b> was the initiative undertaken?</p>	<p>A multicentre, stepped-wedge, randomized controlled trial.</p>
<p><b>OUTCOMES</b></p>	<p>307 patients were recruited to the trial (151 controls, 156 intervention)</p> <p>Patients who received the EAT intervention:</p> <ul style="list-style-type: none"> <li>• Had significantly better nutritional status at the end-of-treatment time point (<math>\beta = -1.53</math> [-2.93 to -.13], <math>P = .03</math>).</li> <li>• Were significantly more likely than control patients to be assessed as well-nourished at each time point, lose a smaller percentage of weight, have fewer treatment interruptions, present lower depression scores, and report a higher quality of life.</li> </ul>

- Had fewer and shorter unplanned hospital admissions.

There were 64 deaths in the 5 years after enrolment, 36 (24%) among those assigned to the control group and 28 (18%) among those assigned to EAT:

- Logistic regression showed statistically significant reduced odds in favour of EAT (odds ratio, 0.33; 95% CI, 0.11-0.96), with an absolute risk reduction of 17% (95% CI, 0.01-0.33) and a relative risk reduction of 55% (95% CI, 0.22-0.92);
- Risk of death was significantly reduced by the EAT intervention (hazard ratio, 0.39; 0.16-0.96).

This trial is the first of its kind to demonstrate the effectiveness of a psychological intervention to improve nutrition in patients with HNC who are receiving RT.

The intervention provides a means to ameliorate malnutrition and the important related outcomes and consequently should be incorporated into standard care for patients receiving RT for HNC.

## REFERENCE

Britton B *et al.* Eating As Treatment (EAT): A Stepped-Wedge, Randomized Controlled Trial of a Health Behavior Change Intervention Provided by Dietitians to Improve Nutrition in Patients with Head and Neck Cancer Undergoing Radiation Therapy (TROG 12.03). *Int J Radiat Oncol Biol Phys.* 2019 Feb 1;103(2):353-362. doi: 10.1016/j.ijrobp.2018.09.027.

Britton B *et al.* Five-Year Mortality Outcomes for Eating As Treatment (EAT), a Health Behavior Change Intervention to Improve Nutrition in Patients With Head and Neck Cancer: A Stepped-Wedge, Randomized Controlled Trial. *Int J Radiat Oncol Biol Phys.* 2024 Jul 15;119(4):1166-1170. doi: 10.1016/j.ijrobp.2024.01.205.