

DIETITIANS' USE OF **ARTIFICIAL INTELLIGENCE**



Saskatchewan
College of Dietitians

Artificial intelligence (AI) is technology that uses computers and machines to perform tasks that normally use human intelligence, such as learning, reasoning and problem solving. It is important to remember that AI tools are just that-tools. They are not meant to replace your clinical decision making, judgement or responsibility as dietitians. Ensure your practice is evidence informed and aligns with Saskatchewan College of Dietitian (SCD) standards.

B.E.A.S.T.I.E. Framework

Developed by Drew Hemler specifically for dietitians, the BEASTIE acronym provides a framework/visual for factors to consider when evaluating AI use or apps/tools in dietetic practice:

Letter	Meaning	Key Consideration
B	Bias	- Who's represented in the data? - Check for inclusive & built-in bias audits.
E	Explainability	- Do you understand how the AI reached its output? - Avoid 'black box' tools.
A	Accountability	- You're responsible for decisions. - Use AI to support---not replace---your judgment
S	Security	- How is data collected, stored, and protected? - Review privacy & compliance policies.
T	Transparency	- Disclose when, why, and how AI is being used? - Clarify its role in care or communication
I	Interoperability	- Will this tool integrate with your systems? - Consider workflows, accessibility, and language support.
E	Environment	- What's the carbon & water footprint? - Favor tools that align with yours & your clients' values

The B.E.A.S.T.I.E. Framework developed by Drew Hemler (full handout accessed [here](#))

Considerations

The use of generative AI is rapidly evolving. Several SCD standards and/or guidance documents are relevant. Consider the following factors so that you can maximize benefits and minimize risks of AI, and ensure safe, ethical, and competent dietetic care.

Data Privacy & Protection

AI uses a combination of algorithms, data, and computing power to perform tasks. If you use AI tools in your dietetic practice, it is your responsibility to make sure this sensitive data is protected.

Before using AI, ask yourself:

- Do the AI tools I plan to use comply with applicable provincial and federal regulations to protect client data?
- Do the tools comply with my employers' policies about data protection, encryption, access, and secure storage? If my employer doesn't have a policy, where should I look for guidance?
- Do I understand where and how the AI tool uses and stores client information and data (eg. internally, externally or outside the country)?
- Is this an open/public vs a closed system? Can I maintain client privacy and confidentiality when using this AI tool?

Review:

- SCD Standard of Practice on Privacy and Confidentiality accessed [here](#).
- Health Information Protection Act- info on Saskatchewan specific legislation [here](#)

Fairness & Biases

Assess who is (and isn't) represented in the data used to develop or train the AI tool, as well as the content of its output. Explore if vendors have tested their models with diverse populations (eg. cultural group, gender, body size or age demographics) or performed bias audits. AI tools trained on incomplete or homogenous datasets can produce skewed outputs that reinforce health disparities.

Before using AI, ask yourself:

- Am I aware that there is potential bias with AI tools related to the population(s) used to train or outputs of the AI tool?
- How can I mitigate potential harms by using human interpretation?

Review:

- SCD Code of Ethics accessed [here](#)

Informed Consent

Clients have the right to make informed decisions about their care, including when and if AI is used in their nutrition care.

Before using AI, ask yourself:

- Can I explain to the client the benefits, limitations, and risks of AI in a way they understand?
- Have I explained to the client how their personal data will be used and stored, including its use in the training of AI tools?
- If appropriate, have I given the client the choice to consent or opt out if they do not want AI used in their care?

Review:

- SCD Standard of Practice on Consent accessed [here](#).
- SCD Guideline on Consent accessed [here](#).

Safety & Transparency

AI should support, not replace, human decision-making. As a health-care professional, you are ultimately responsible for client care decisions. Remember, there is a limit to what AI should do without some form of human oversight or input.

Before using AI, ask yourself:

- Have I used my clinical judgement to review the appropriateness of recommendations produced through AI?
- Am I aware that I am responsible and accountable for decisions made with the help of AI?
- How will I educate myself about AI (eg. how it works, limits, how to interpret outputs)?

Review:

- SCD Standard of Practice on Conflict of interest accessed [here](#).
- SCD Standard of Practice on Professional practice obligations accessed [here](#).

Environmental Impact

AI-based systems and tools may have an environmental impact due to the energy consumption required for the operation of large data centers. As environmental sustainability is an emerging ethical consideration, consider the environmental footprint of AI tools, including energy and water use, carbon emissions, and sustainability practices.

Before using AI, ask yourself:

- Do I understand the ecological impact of using AI and have I reflected on how this aligns with my own values and/or my clients' values on sustainability.

Review:

United Nations Environment Programme. "AI Has an Environmental Problem. Here's What the World Can Do About That." UNEP, September 21, 2024. <https://www.unep.org/news-and-stories/story/ai-has-environmental-problem-heres-what-world-can-do-about>.

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