



FASD-CAN

Fetal Alcohol Spectrum Disorder
Care Action Network

RESEARCH SNIPPETS INFORMATION SHEET

CBD and FASD:

Exploring New Research into Alcohol Exposure during Development

Topic: Exploring the potential of Cannabidiol (CBD) to support the health and wellbeing of people with Fetal Alcohol Spectrum Disorder (FASD).

Overview: This information sheet summarises a recent study by Navarrete et.al. (2025) exploring how CBD might help manage some of the challenges associated with FASD. The research was conducted using a 'mouse model' to study the effects of alcohol exposure during development (often called 'Prenatal Alcohol Exposure' or PAE). These findings offer a hopeful glimpse into future supports for the FASD community in Aotearoa.

Key Research Findings

- 1. Protecting and Repairing the Brain:** The study found that CBD acts as a 'neuroprotective' and 'anti-inflammatory' agent. This means it helps protect brain cells and reduces swelling or irritation in the brain. Specifically, it helped repair long-lasting damage in the 'hippocampus' (the part of the brain used for memory) and the 'prefrontal cortex' (the part used for decision-making and managing emotions).
- 2. Balancing the 'Endocannabinoid System':** CBD works by modulating the 'endocannabinoid system'—a natural system in our bodies that helps regulate things like mood, sleep, and appetite. By supporting this system, CBD helped balance brain chemistry that had been altered by alcohol exposure.
- 3. Improving Gut Health:** Researchers discovered that alcohol exposure during development can cause 'dysbiosis'—an imbalance of the bacteria in the gut. CBD treatment helped return these bacteria to a healthier state, repairing the 'gut-brain axis' (the communication line between our stomach and our brain).
- 4. Reducing Alcohol Use and Distress:** The research showed that CBD significantly lowered the motivation to use alcohol and helped alleviate feelings similar to anxiety and depression.
- 5. Gender-Specific Benefits:** While the treatment helped all subjects, the positive changes were particularly significant for females. In the study, female subjects showed a higher motivation to consume alcohol, but CBD treatment reversed this behaviour.

Why this Research Matters in Aotearoa New Zealand

For People with FASD and their Whānau: This research offers a sense of hope by moving towards a 'whole-person' approach to health. By showing that alcohol exposure affects both the brain and the gut, it validates the experiences of many whānau who find that physical wellbeing, gut health and emotional regulation are closely linked. It suggests that in the future, supporting a person with FASD might include simple medical tools that can help 'calm' the brain's internal environment along with environmental supports.



For Caregivers: Caregivers often navigate many uncertainties regarding the long-term well-being and security/safety of the person they support. Seeing scientific evidence that common challenges—like risks of substance use or emotional distress—could be addressed with targeted treatments (like CBD) provides a greater sense of confidence and a new perspective on long-term management. The finding that early support (at 'weaning' or early life stages) could have protective effects is particularly encouraging for those supporting younger children.

For Professionals: For clinicians and support workers, this study highlights that CBD may act on specific brain receptors (like 'dopamine receptors') to help regulate behaviour. It encourages professionals to:

- consider how 'anti-inflammatory' supports might play a role in FASD support.
- be mindful of 'sex-dependent' differences in how FASD may present and be treated.
- look beyond the central nervous system and consider gastrointestinal (gut) health as a valid area for support and intervention.

Important Considerations and Research Limitations

It is important to remember that this was a **pre-clinical study**. This means it was done in a laboratory setting with mice, not with humans.

- **Clinical Trials are Needed:** Before CBD can be recommended for people with FASD, 'human clinical trials' must be conducted to ensure it is safe and effective for people.
- **Medical Regulation:** In Aotearoa, CBD is a regulated medicinal product. It does not contain THC (the part that makes people feel 'high'), but it can only be accessed with a prescription from a registered doctor.
- **No 'Silver Bullet':** While this research is potentially a breakthrough, support for FASD will always involve a 'wrap-around' approach, including interdependence, stable housing, education support, and loving whānau environments.

Summary for Practice

This research suggests that CBD may eventually become a therapeutic tool to address some of the most frequent consequences of alcohol exposure during development, and that early intervention with CBD could potentially repair biological damage and reduce the risk of substance use issues later in life. For practice in Aotearoa, this means staying informed about 'evidence-based' medical developments while continuing to provide strong environmental and relational supports. Always consult a medical professional before considering changes to a person's health plan.

Citation

Navarrete, F., Cabrera-Rubio, R., Gasparyan, A., Aarnio, R., López-Picón, F., Helin, S., Rajander, J., Collado, M. C., & Manzanares, J. (2025). **Cannabidiol modulates brain molecular alterations, gut microbiota dysbiosis and alcohol self-administration in a mouse model of fetal alcohol spectrum disorder.** *Biomedicine & Pharmacotherapy*, 193, 118791.

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