Manager Professional Services
Dietitians Association of Australia

8 June 2017

Dear Manager of Professional Services,

As part of the development of the National Guidelines for Autism Diagnosis, we would like to provide your organizations the opportunity to provide additional input the guidelines. We would like to seek your assistance in receiving the submission representing the perspective of disability dietitians..

We recommend that you liaise with other relevant bodies, such as Registration Boards, to prepare this submission.

The template for this submission is contained in the following pages, and we remind you to work within the specified word limits for each section. Submissions need to be received by Monday 19 June 2017.

Please feel free to contact the Project Coordinator, Dr Kiah Evans, to discuss this request further or to obtain further information. Kiah can be contacted on (08) 9489 7662 or Kiah.Evans@telethonkids.org.au.

Yours sincerely,

National Guideline Project Team

The following questions relate to an autism diagnostic assessment:

An autism diagnostic assessment is an evaluation conducted to determine if the diagnostic criteria for autism (e.g. DSM-5 or ICD-10) have been met.

Please indicate if dietitians' have the appropriate qualifications and authority to take on the following roles during an autism diagnostic assessment:

A diagnostician working as a single clinician?	Yes ☐	No ☒
A diagnostician working as a member of a clinical team?	Yes ☐	No ☒
An assessor working as a member of a clinical team, providing information to a diagnostician?	Yes ☒	No ☐
An information source (through reports, checklists or conversations) to assessors and/or diagnosticians?	Yes ☒	No ☐

Please outline any specific requirements (e.g. membership, registration, qualifications, experience): Accredited Practising Dietitian, with experience in disability. Two additional documents that may be relevant to consider include the DAA Disability Role Statement and Dietetic Core Standards for Disability.

What clinical flags would suggest that a dietitian should be involved in an autism diagnostic assessment?

(Maximum 100 words)

A combination of social, behavioural and physical flags would suggest that an APD should be involved in the assessment process.

Flags which have a higher prevalence in individuals with autism which could contribute to the Tier One diagnosis

- Any food behaviours such as texture issues, rigidity around food
- Social concerns with food/mealtimes
- Physical flags gastrointestinal tract issues (gastric reflux, bloating, constipation, diarrhoea, faecal incontinence).

Other issues commonly observed in practice and documented in the literature would be relevant in Tier Two assessments, including

- malnutrition
- poor growth
- nutritional deficiencies (such as anaemia, Vitamin C deficiency)
- obesity
- food intolerances or allergies.

Describe what a dietitian's component of an autism diagnostic assessment would typically contain (please feel free to refer to specific standardize assessments and/or non-standardized information collection strategies):

(Maximum 200 words)

Assessment by an APD would be comprehensive and contribute to both the autism diagnosis assessment and the holistic assessment of the person with autism/suspected autism to inform intervention and monitoring.

Dietetic assessment is a component of the Nutrition Care Process, a systematic approach to providing nutrition care. The Nutrition Care Process includes four phases- Nutrition Assessment, Diagnosis, Intervention and Monitoring/Evaluation.

Nutrition Assessment would consider

- client history from observation and interview with the individual with autism, family members, and care givers. The client history includes social history and health history with reference to health records, bowel charts etc where available),
- food/nutrition related history,
- anthropometric measures,
- biochemical/medical tests, pathology results or procedures.

Aspects of the dietetic assessment of a person with suspected autism which would contribute to the diagnosis of autism include questions about food related behaviour; food avoidance, sensory aspects of eating and drinking; food intolerances, and gut issues (gastric reflux, bloating, constipation, diarrhoea, faecal incontinence). Restrictive practice is also commonly encountered in this group and should be explored.

Reporting of the assessment would include nutrition diagnosis, with particular reference to items contributing to autism diagnosis. Reporting would also include recommendations for dietetic intervention and monitoring.

The following table contains the DSM-5 Criteria for Autism Spectrum Disorder. Please describe the dietitian's current or potential role in relation to each diagnostic criteria for an autism diagnostic assessment:

DSM-5 Criteria	**Dietitian Role in Diagnostic Assessment**
Deficits in social communication and social interaction:	
A. Deficits in social-emotional reciprocity, ranging, for example, from abnormal social approach and failure of normal back-and-forth conversation; to reduced sharing of interests, emotions, or affect; to failure to initiate or respond to social interactions.	An APD would identify and report on social interaction and behaviours related to food, eating and drinking.
B. Deficits in nonverbal communicative behaviours used for social interaction, ranging, for example, from poorly integrated verbal and nonverbal communication; to abnormalities in eye contact and body language or deficits in understanding and use of gestures; to a total lack of facial expressions and nonverbal communication.	An APD would identify and report on social interaction and behaviours observed in relation to situations involving food and eating

C. Deficits in developing, maintaining, and understanding relationships, ranging, for example, from difficulties adjusting behaviour to suit various social contexts; to difficulties in sharing imaginative play or in making friends; to absence of interest in peers.	During an assessment an APD would identify and report on interactions occurring during the assessment. Issues with the social context of eating and drinking may be identified by the APD. For example the APD may identify that the client may not want to eat with others. Physical environment and seating may impact on desire to eat/drink. Anxiety in a social context can trigger other behaviours. Based on assessment, dietetic management of food and dining experiences would aim to decrease anxiety and avoid future food aversions or disordered eating patterns or eating disorders.
Restricted, repetitive patterns of behaviour, interests, or activities:	
A. Stereotyped or repetitive motor movements, use of objects, or speech (e.g., simple motor stereotypies, lining up toys or flipping objects, echolalia, idiosyncratic phrases).	The APD would identify behaviours and anxiety related to food and report on these. Behaviours that may be identified by an APD include: lining up of food, placing food in a particular order or separating mixed food especially based on colour, shape, texture and smell.
B. Insistence on sameness, inflexible adherence to routines, or ritualized patterns of verbal or nonverbal behaviour (e.g., extreme distress at small changes, difficulties with transitions, rigid thinking patterns, greeting rituals, need to take same route or eat same food every day).	There are a number of food related behaviours related to this criteria that an APD would help identify and report. Behaviours that may be identified by an APD include: restrictive food choices leading to restricted nutritional intake; food rituals/rules and distress at trialling different foods. Eating environments may cause anxiety or distress, for example specific crockery, cutlery, table linen/placemats and seating arrangements may influence the person's desire to eat/drink. Interruptions to sequences around eating and drinking can prevent the individual from consuming food and drink until the sequencing is correct. APDs can help identify which rituals are harmful to nutrition and health, and can might be accommodated with low risk of harm.

C. Highly restricted, fixated interests that are abnormal in intensity or focus (e.g., strong attachment to or preoccupation with unusual objects, excessively circumscribed or perseverative interests).	APDs can identify and report restricted/fixated interests related to food and eating. APDs may identify where the client has particular favourite foods, Pica or Pica-like behaviour, or obsessions with texture and appearance of food. For example, a child may become obsessed with dinosaurs and all food needs to cut into this shape/placed on a particular plate etc. Observations would be reported to professionals involved in diagnosis
D. Hyper- or hypo-reactivity to sensory input or unusual interest in sensory aspects of the environment (e.g., apparent indifference to pain/temperature, adverse response to specific sounds or textures, excessive smelling or touching of objects, visual fascination with lights or movement).	APDs play an important role in the assessment of hypo/hyper reactivity to sensory input and reporting back on this. APDs may note issues with smells, textures, or sounds of foods, which often suggest sensory issues. For example, there may be issues with the sounds of food preparation which distress the child. In addition, APDs may identify food intolerances, food aversions, or food addictions. Although there is limited evidence, in practice it is thought that somatosensory processes may be involved i.e. sensitivities in the mouth may trigger behaviour or gut issues (bloating, constipation or diarrhoea) through neurological mechanisms.
1. Symptoms must be present in the early developmental period.	APDs are able to identify some of the food related symptoms in early childhood. Feedback from the parents, e.g. about not coping with meal times may also be useful information for diagnosis. Early identifiers for APDs include difficulties transitioning from bottle, to cup and to normal food. Children may remain on formula/baby food for longer periods than recommended. APDs can identify if these early childhood behaviours have been maintained through childhood into adulthood.
2. Symptoms cause clinically significant	Food related problems can lead to the inability to consume adequate nutrition which can

impairment in social, occupational, or other important areas of current functioning.	contribute to a multitude of difficulties including poor growth, constipation, poor concentration, nutrient deficiencies, difficulties with learning etc. Limited food choices or food related behaviours may also impact on an ability to interact freely in family or social environments. Constipation can be a trigger for changes in behaviour and anxiety due to discomfort or pain, and potentially impact on other areas of functioning. Food intolerances may impact on behaviour or gut issues (bloating, constipation or diarrhaea) through neurological mechanisms.
3. These disturbances are not better explained by intellectual disability (intellectual developmental disorder) or global developmental delay.	These symptoms can appear independent of intellectual disability or global developmental delay.
Specify if: • With or without accompanying intellectual impairment • With or without accompanying language impairment • Associated with a known medical or genetic condition or environmental factor • Associated with another neurodevelopmental, mental, or behavioural disorder • With catatonia	☐ Not Applicable OR Click here to enter text.

The following questions relate to an assessment to identify support needs:

An assessment to identify support needs is an evaluation conducted to explore the supports (e.g. interventions, social groups, information resources) that would assist the individual and their family to address challenges and optimize strengths.

Do dietitians have the appropriate qualifications and authority to take on the role of an assessor during an assessment to identify support needs:

As a single clinician / professional?	Yes ☐	No ☒
As a member of a clinical / professional team?	Yes ☒	No ☐
As an information source to a clinical / professional team?	Yes ☒	No ☐

Please outline any specific requirements (e.g. membership, registration, qualifications, experience): Accredited Practising Dietitian and experience as per part 1

What clinical flags would suggest that a dietitian should be involved in an assessment to identify support needs?

(Maximum 100 words)

A combination of social, behavioural and physical flags would suggest that an APD should be involved in not only assessment but also planning to identify support needs. Any food behaviours such as texture issues, rigidity around food, or social concerns with food/mealtimes would indicate an APD should be involved in providing support needs. Physical flags including malnutrition, poor growth, nutritional biomarkers, obesity, food allergy or food intolerances, other special dietary requirements, gut issues (gastric reflux, bloating, constipation, diarrhoea, faecal incontinence), all require APD input in management.

Describe what a dietitian's component of an assessment to identify support needs would typically contain (please feel free to refer to specific standardize assessments and/or non-standardized information collection strategies):

(Maximum 200 words)

Aspects of the dietetic assessment which would be used to develop a nutrition related diagnosis, and plan an intervention and monitoring to address food or nutrition related concerns would include

- any food behaviours such as texture issues, rigidity around food, or social concerns with food/mealtimes
- obesity, poor growth, malnutrition, vitamin or mineral deficiencies, food allergy or food intolerances, other special dietary requirements

- gut issues (gastric reflux, bloating, constipation, diarrhoea, faecal incontinence),

There is standard terminology used for the different phases of the Nutrition Care Process. Some of this standard terminology for assessment and diagnosis could be used to describe the food and nutrition issues identified in those with autism. This includes standard terminology related to food intake, eating environments, mealtime behaviour, avoidance behaviour, anthropometry and more.

The following questions relate in general to the national guideline under development:

From the perspective of dietitians, what are the most important considerations to address when developing a national guideline for the diagnosis of autism spectrum disorder in Australia?

(Maximum 200 words)

Given the range of symptoms and complexity of Autism Spectrum Disorder a multidisciplinary assessment including an APD, where appropriate, is vital for accurate diagnosis. If aspects of the multidisciplinary approach were missing this could impact on the person care. For example, lack of consideration of food and nutrition related behaviours etc. may impact on the person's development, health, level of functioning and participation in family and community.

Please provide reference details for any core documents that outline the dietitian's role in autism assessment and/or describe a service delivery model specific to dietitians that is compatible with autism assessments.

(Maximum 200 words)

Below are a range of references related to Nutrition and Autism.
The Nutrition Care Process information and up-to-date terminology can be accessed via the Electronic Nutrition Care Process Terminology (eNCPT) website. This is a subscription based website that is provided to APDs who are members of DAA. The website includes information on the process as well as the terminology and definitions.

Please feel free to make additional comments:

(Maximum 200 words)

Assessment by APDs could contribute to evidence for the diagnosis of autism. There are many food and nutrition related behaviours and symptoms that can exist in autism and an APD is the health professional with the skills and training to

recognise and report on these. APDs are also invaluable in the planning phase and in management of food and nutrition related symptoms and/or behaviours in people with autism.

Nutrition and Autism References

1. Behavioral Health Nutrition (Dietetic Practice group of Academy of Nutrition and Dietetics) factsheets and newsletters - http://www.bhndpg.org/
2. Position of the Academy of Nutrition and Dietetics: Nutrition Services for Individuals with Intellectual and Developmental Disabilities and Special health Care Needs. *J Acad Nutr Diet* 2015; **11**: 593-608
3. Sharp WG, Berry RC, McCracken C et al. Feeding Problems and Nutrient Intake in Children with Autism Spectrum Disorders: A Meta-analysis and Comprehensive Review of the Literature. *J Autism Dev Disorders* 2013; **4**: 2159-2173
4. Goldschmidt J, Song H-J. At risk and Underserved: A Proposed Role for Nutrition in the Adult Trajectory of Autism. *J Acad Nutr Diet* 2015; **115**: 1041-1047
5. Hubbard KL, Anderson, SE, Curtin C, Must A, Bandini LG. A comparison of Food refusal Related to Characteristics of Food in Children with Autism Spectrum Disorder and Typically Developing Children. *J Acad Nutr Diet* 2014; 114: 1981-1987
6. Stewart PA, Hyman SL, Schmidt BL et al. Dietary Supplementation in Children with Autism Spectrum Disorders: Common, Insufficient and Excessive. *J Acad Nutr Diet* 2015; **15**: 1237-1248
7. Cermak SA, Curtin C, Bandini LG. Food Selectivity and Sensory Sensitivity in Children with Autism Spectrum Disorder. *J Am Diet Assoc* 2010; **110**: 238-246