



# RESOURCE MANUAL

Birth to Five years



**MAKE  
HEALTHY  
NORMAL**



## Acknowledgements

The *Munch & Move* Birth to Five years Resource Manual is based on the two previous manuals, namely the *Munch & Move* Resource Manual (2010) and the *Munch & Move* Birth to Three years Resource Manual (2010). The NSW Ministry of Health wishes to acknowledge the following individuals and groups for their contribution to the development of this and earlier versions of the *Munch & Move* manuals:

For the revision of the 2017 version:

- Early Childhood Training and Resource Centre (ECTARC)
- Staff from the NSW Office of Preventive Health, NSW Ministry of Health

For feedback on draft versions of the previous manuals:

- Early Childhood Training and Resource Centre (ECTARC)
- Local Health District *Munch & Move* key contacts
- KU Children's Services
- Noogaleek Children's Centre
- NSW Family Day Care Association
- NSW Health Early Childhood Physical Activity and Healthy Eating Working Group
- Kristine Lobley, Consultant Paediatric Dietitian (Accredited Practising Dietitian)
- Staff from the Centre for Population Health and Office of Preventive Health, NSW Ministry of Health

For use of related material:

- National Heart Foundation of Australia (ACT Division) and the ACT Government for the use of material from their program *Kids at Play*
- Hunter New England Area Health Service for use of material from their *Good for Kids, Good for Life* program including *I Move We Move The Guide*, *The Physical Activity Handbook Babies* and *The Physical Activity Handbook Toddler*.

For photographic images used throughout the manual:

- Staff and children from Keiraview Children's Service, Clovell Services Granville, Midson Road Childcare Centre Epping, Wallaroo Children's Centre Shellharbour, Waitara Children's Services, Erina Kindergarten, Short Street Preschool & Occasional Care Centre, Tenna Gold Star Family Day Care Nowra, Debbie's Family Day Care and Sue's Family Day Care.

In developing this manual, every effort has been made to acknowledge the original sources of information and to seek permission to reproduce published work.

## Disclaimer

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© NSW Ministry of Health 2017  
*First edition 2010*  
*Second edition – Reprinted with amendments 2011*  
*Third edition – Reprinted with amendments 2014*  
*Fourth edition – Reprinted with amendments 2017*

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*SHPN: (CPH) 170473*  
*ISBN: 978-1-76000-713-3(print)*  
*978-1-76000-714-0(online)*

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## Introduction

### What is *Munch & Move*?

*Munch & Move* is a fun, play-based program that supports the health, development and wellbeing of young children from birth to five years of age, attending Early Childhood Education and Care (ECEC) services across NSW. The program is a NSW Health initiative that offers early childhood educators (educators) the opportunity to encourage children's healthy eating and physical activity using a range of learning experiences. The specific objectives of the program are listed below:

- Support ECEC services and families to provide healthy eating opportunities for children.
- Provide ideas for healthy food-based learning experiences.
- Support ECEC services and families to incorporate more physical activity into children's regular routines.
- Support the development of Fundamental Movement Skills (FMS) through developmentally appropriate play-based physical activity.
- Promote a reduction in the time spent engaged in screen time (TV, computers, DVDs, hand-held devices).
- Provide ideas and information for communicating with families.
- Provide professional development for educators.

*Munch & Move* also supports ECEC services to develop and implement policies and procedures that promote healthy eating and physical activity and limit screen time recreation.



## Why do we need *Munch & Move*?

Children spend a significant amount of time in early childhood settings including preschools, long day care services and family day care services, making them an ideal setting to promote appropriate healthy eating and physical activity habits.

### Research has shown that:

- In Australia, recent studies have shown that 21.2% of two to four year olds are overweight or obese. By age five, almost one in four children are obese or overweight<sup>1</sup>.
- In NSW, 17.5% of children are overweight or obese at the time they start kindergarten<sup>2</sup>.
- Over two-thirds (68.8%) of children in NSW aged two to 15 years consumed the recommended number of serves of fruit per day for their age group, while only 7.7% of children aged two to 15 years consumed the recommended number of serves of vegetables per day for their age group<sup>3</sup>.
- It was estimated that more than half of NSW children aged two to 15 years (59.9%) consume four or more cups of water per day, with only a small proportion of children consuming less than one cup (or no cups) of water per day (1.4%)<sup>3</sup>.
- About one-third (35.0%) of children in NSW usually consume five or more cups of sugar sweetened drinks per week, with a similar proportion (30.6%) usually consuming five or more cups of fruit juice per week<sup>4</sup>.
- Young children are consuming excessive amounts of food and drink which are high in fat and added sugar<sup>4</sup>. It was estimated that about two-thirds of children in NSW consumed fast food on a weekly basis (31.5% of children aged two to eight years; 37.3% of children aged nine to 15 years)<sup>3</sup>.
- Four to five year old Australian children spend almost 2½ hours per day watching TV if they are not in care or at school, and over 1½ hours watching television on days they have been in care or at school<sup>5</sup>.





Key risk factors for overweight and obesity, such as physical inactivity, excess screen time and poor diet are modifiable. They can be addressed from an early age through positive, health promoting messages and strategies. Promoting healthy eating and active lifestyles to help prevent children from becoming overweight is a high priority for the NSW Government.

## **Six key *Munch & Move* messages**

The six key messages that form the basis of *Munch & Move* are:

- **Encourage and support breastfeeding**
- **Choose water as a drink**
- **Eat more fruit and vegetables**
- **Choose healthier snacks**
- **Get active each day**
- **Turn off the screen and get active.**

Each of these messages is of equal importance in promoting healthy, active habits in children from a young age. Listed below are the main points under each key message. More detail on each key message is provided in the various sections of this manual.

### **Encourage and support breastfeeding**

- Breastfeeding is the best and healthiest way to feed an infant.
- Breastfeeding alone is recommended until around six months of age.
- From around six months of age, solids can be introduced while continuing breastfeeding up to 12 months of age or longer.
- Educators can play a valuable role in encouraging and supporting mothers who wish to breastfeed and in providing information to all families on appropriate introduction to first foods and drinks.

### **Choose water as a drink**

- Water is the best drink to quench thirst. Young children should be encouraged to drink plenty of water every day.
- Milk is an ideal drink for children as it is an important source of protein, calcium and vitamin D.
- Drinks such as cordial, fruit juice drinks, soft drinks, sports drinks and flavoured mineral waters are high in sugar and kilojoules. Children do not need any sweet drinks, and if provided, it should only be sometimes and in very small diluted amounts.
- Fruit juice of any type is not recommended. A piece of fruit and a drink of water is a much better choice.



### **Eat more fruit and vegetables**

- All fruit and vegetables are a rich source of vitamins, minerals and dietary fibre.
- Select fresh fruit and vegetables in season when they taste best and are good value for money.
- Serve fruit and vegetables in a variety of ways to tantalise children's taste buds.
- Canned and frozen fruit and vegetables are also very healthy choices.

### **Choose healthier snacks**

- Snacks are as important as meals in meeting young children's nutritional needs.
- Snacks should be based on healthy, filling foods such as vegetables, wholegrain cereal-based foods, fruits and dairy products.
- Snack foods that are high in added sugar, saturated fat or salt are generally high in kilojoules and low in nutrients. Most processed and packet snacks will fall into this group and can contribute to excess weight gain in children when eaten too often.

### **Get active each day**

- Children should be active every day in as many ways as possible.
- Physical activity for babies (birth to one year of age) should be encouraged from birth – particularly supervised floor-based play in safe environments.
- Toddlers (one to two years of age) and preschool aged children (three to five years of age) should be physically active every day for at least three hours spread throughout the day.





## Turn off the screen and get active

- For children younger than two years of age, sedentary screen time is not recommended ie watching television or using other electronic media (DVDs, computer, and electronic games).
- For children two to five years of age, sedentary screen time (ie television, DVDs, computer, electronic games) should be limited to less than one hour per day.
- Responsible adults should monitor and control the time spent by children engaged in these activities.

## Links to other healthy eating and physical activity programs in NSW

*Munch & Move* links to other government programs taking place in NSW primary schools that also promote healthy eating and physical activity – such as *Live Life Well @ School* and *Crunch&Sip*®.

*Live Life Well @ School* is a joint initiative between the NSW Department of Education and NSW Ministry of Health to:

- Get more students, more active, more often, and
- Focus on healthy eating habits.

*Live Life Well @ School* assists schools to:

- Develop whole of school strategies that support physical activity and healthy eating
- Improve the teaching of nutrition and physical education through a focus on PDHPE programs
- Foster community partnerships that promote and support whole of school strategies
- Provide opportunities for more students to be more active, more often.

*Crunch&Sip*® is a set break during the school day to eat salad vegetables and fruit, and drink water in the classroom. Students bring vegetables or fruit to school each day for the *Crunch&Sip*® break. Each child also has a small clear bottle of water in the classroom to drink throughout the day to prevent dehydration.

Further information on both *Live Life Well @ School* and *Crunch&Sip*® can be found through the NSW *Healthy Kids* website: [www.healthykids.nsw.gov.au](http://www.healthykids.nsw.gov.au)



## How to use this resource

The *Munch & Move Resource Manual* has been designed to provide educators with a range of fun, innovative and developmentally appropriate ideas and learning experiences that can be included as part of young children's daily experiences. The manual also contains detailed practical information on healthy eating and physical activity suitable for children from birth to five years of age.

It is important that all children have the opportunity to participate in *Munch & Move* learning experiences. To support this, all *Munch & Move* ideas and learning experiences can be adapted to suit each child's identity, interests and abilities, ensuring each child's sense of belonging is fostered and all children are included in healthy eating and physical activity learning experiences. ECEC services should also ensure that learning experiences engage children and families from Aboriginal communities and culturally and linguistically diverse backgrounds.

For ease of use, the manual has been divided into seven sections:

- Section One:** *Munch* – Encouraging healthy eating
- Section Two:** *Munch* ideas and learning experiences
- Section Three:** *Move* – Encouraging active play
- Section Four:** Fundamental Movement Skills
- Section Five:** *Move* ideas and learning experiences
- Section Six:** *Monitor* – Limiting screen time recreation
- Section Seven:** *Making it Happen* – Day to day policies, practices and guidelines.

Each section provides a range of information and suggested ways that ECEC services can support healthy eating and physical activity and limit screen time for young children. A list providing related information is included at the end of both the *Munch* and the *Move* sections of the manual. A reference list is included at the back of the manual.

The *Making it Happen* section includes sample policy templates on breastfeeding, healthy eating and physical activity and screen time to assist ECEC services to implement the key *Munch & Move* messages. These sample policies can also be downloaded as word documents from the *Munch & Move* section of the NSW *Healthy Kids* website making it easy for ECEC services to tailor the policies to reflect the community context of their individual service.



The policy documents are important tools for ECEC services as they set consistent standards and approaches on healthy eating and physical activity throughout the ECEC service. These standards can then be communicated and regularly reinforced to staff and families.

## How does *Munch & Move* align with the National Quality Framework?

Research shows that the first five years of a child's life shapes future health, learning and social development. In recognition of this, the Australian Government, in partnership with all states and territory governments, agreed to establish a National Quality Framework<sup>7</sup> (NQF) to drive continuous improvement in ECEC services.

The *Healthy Eating and Physical Activity Guidelines for Early Childhood Settings*<sup>8</sup> are considered part of the NQF. The *Munch & Move* program contains information that supports these Guidelines. These Guidelines are reflected in the key messages, ideas and learning experiences of *Munch & Move*.

## How does *Munch & Move* relate to the Early Years Learning Framework?

*Belonging, Being and Becoming, The Early Years Learning Framework (EYLF)*<sup>9</sup> is a key component of the NQF with the aim of ensuring quality and consistency in the delivery of early childhood education programs across all ECEC settings.

The *EYLF* outlines the provisions that educators should make for the child's experience at the ECEC service. This includes the promotion of a holistic approach to teaching and learning, paying attention to the child's physical, personal, social, emotional and spiritual wellbeing as well as cognitive aspects of learning. These are communicated through the following five learning outcomes:

- Children have a strong sense of identity.
- Children are connected and contribute to their world.
- Children have a strong sense of wellbeing.
- Children are confident and involved learners.
- Children are effective communicators.

The *EYLF* and *Munch & Move* both have a strong emphasis on learning through play. They also recognise the importance of intentional teaching, where educators are deliberate, purposeful and thoughtful in their decisions and actions to scaffold the children's existing knowledge and skills.



The *EYLF* provides the structure for each ECEC service to implement the *Munch & Move* program based on the unique characteristics of their children, families and educators and the context in which the ECEC service operates. Educators are encouraged to consider the *EYLF* principles, practice and learning outcomes when implementing *Munch & Move* into the ECEC setting.

## How does *Munch & Move* relate to the National Quality Standard?

The *National Quality Standard* (NQS) which is a key aspect of the NQF came into effect on 1 January 2012 and was revised effective from February 2018. The NQS promotes continuous quality improvement in ECEC services<sup>6</sup> across Australia.

The NQS consists of seven Quality Areas, each containing Standards and Elements, that ECEC services are assessed and rated against.

The seven Quality Areas are:

1. Educational program and practice
2. Children's health and safety
3. Physical environment
4. Staffing arrangements
5. Relationships with children
6. Collaborative partnerships with families and communities
7. Governance and Leadership

*Munch & Move* has very strong links with Quality Area 2, Standard 2.1 that requires each child's health and physical activity to be supported and promoted. Implementing the *Munch & Move* program into the ECEC setting will assist ECEC services with meeting the requirements of Standard 2.1 and its related elements 2.1.1 and 2.1.3.

### Quality Area 2 – Children's health and safety

*Standard 2.1 – Each child's health and physical activity is supported and promoted.*

- Element 2.1.1 - Each child's wellbeing and comfort is provided for, including appropriate opportunities to meet each child's need for sleep, rest and relaxation.
- Element 2.1.3 - Healthy eating and physical activity are promoted and appropriate for each child.

## References

1. Australian Bureau of Statistics (2015). **National Health Survey: First results 2014-2015** <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.001>
2. Hardy LL, Mihrshahi S, Drayton BA, Bauman, A (2016). **NSW Schools Physical Activity and Nutrition Survey (SPANS) 2015: Full Report**. Sydney: NSW Ministry of Health. .
3. Centre for Epidemiology and Evidence (2016). **NSW Population Health Survey (SAPHaRI)** NSW Ministry of Health.
4. Rangan AM, Randall D, Hector DJ, Gill TP, Webb KL (2007). **Consumption of 'extra' foods by Australian children: types, quantities and contribution to energy and nutrient intakes**. *European Journal of Clinical Nutrition*, March 14 [Epub]. doi:10.1038/sj.ejcn.1602720.
5. Australian Institute of Family Studies (2014). **Growing up in Australia. The Longitudinal Study of Australian Children Annual Statistical Report 2013**. Melbourne: AIFS.
6. Australian Children's Education & Care Quality Authority (2017). **Revised National Quality Standard and Other Changes from 1 Feb 2018 (National Quality Framework Information sheet)**
7. Australian Government Department of Health & Ageing (2013). **Get Up & Grow: Healthy eating and physical activity for early childhood** (Director/Coordinator Book).
8. Commonwealth Department of Education, Employment and Workplace Relations (2009). **Belonging, Being and Becoming - The Early Years Learning Framework for Australia**. Canberra: Commonwealth Department of Education, Employment and Workplace Relations.
9. National Health and Medical Research Council (2013). **Australian Dietary Guidelines**. Canberra: National Health and Medical Research Council.
10. National Health and Medical Research Council (2012). **Infant Feeding Guidelines**. Canberra: National Health and Medical Research Council.
11. National Health and Medical Research Council (2013). **The Australian Guide to Healthy Eating**. Australia Canberra: National Health and Medical Research Council.
12. NSW Ministry of Health (2014). **Caring for Children: Birth to 5 years (Food, Nutrition and Learning Experiences)**.
13. Commonwealth of Australia, Department of Health (2017). **Australian 24-Hour Movement Guidelines for the Early Years (birth to 5 years): An Integration of Physical Activity, Sedentary Behaviour, and Sleep**.
14. Queensland Government, Sleep in Early Childhood Research Group (2017). **Sleep health and sleep development in Early Childhood Education and Care: Babies and toddlers**, [<https://det.qld.gov.au/earlychildhood/news/Documents/pdf/factsheet-sleep-infants-toddlers.pdf> viewed 28 August 2017].
15. Sasse M (2009). **Smart Start: How exercise can transform your child's life**. New Zealand: Exisle Publishing Limited.

16. Kearns, K & Austin, B (2007). **Working in Children's Services Series: Birth to Big School**. Frenchs Forest, NSW: Pearson Australia.
17. Sanders SW (2002). **Active for Life. Developmentally appropriate movement programs for children**. Washington DC: National Association for the Education of Young Children.
18. Department of Education, Victoria (1996, updated as a web-based resource in relation to the Victorian Essential Learning Standards 2009). **Fundamental Motor Skills: A Manual for Classroom Teachers**.
19. Hastings G, McDermott L et al (2007). **The extent, nature and effects of food promotion to children: a review of the evidence**. Technical paper prepared for the World Health Organisation. Retrieved 9 August 2007.
20. American Academy of Pediatrics (2005). **Committee on Communications, Children, Adolescents and Advertising**. *Pediatrics*; 95: 295-7.
21. Viner RM and Cole TJ (2005). **Television Viewing In Early Childhood Predicts Adult Body Mass Index**. *Journal of Pediatrics*, 147:429-435.







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