



THE CHEMICAL, PHYSICAL, AND SENSORY PROPERTIES OF COMPLEMENTARY FOODS AS
AFFECTED BY THE COOKING
METHOD

YUNIAR WIKA P P, Dr. Dwi Larasatie Nur Fibri, S.T.P., M.Sc; Bambang Dwi Wijatniko, S.T.P., M.Agr.Sc., M.Sc.
Universitas Gadjah Mada, 2022 | Diunduh dari <http://etd.repository.ugm.ac.id/>

CONTENTS

COVER	i
INDEPENDENT UPLOAD LETTER	ii
APPROVAL SHEET	iii
DECLARATION OF RESEARCH AUTHENTICITY	ivv
PREFACE	v
ACKNOWLEDGEMENT	vi
CONTENTS	ix
LIST OF TABLES	xii
LIST OF PICTURES	xiii
INTISARI.....	xiv
ABSTRACT.....	xv
CHAPTER I INTRODUCTION	1
1.1. Background	1
1.2. Research Problem.....	5
1.3. Research Objectives	5
1.4. Research Benefits	6
CHAPTER II LITERATUR REVIEW	7
2.1. Complementary Foods	7
2.2. Cooking Method of Complementary Foods	12
2.2.1. Boiling method	12
2.2.2. Steaming method	12
2.2.3. Slow cooker method	13
2.2.4. Baby food processor method	14
2.3. Ingredients	17
2.3.1. Potatoes (<i>Solanum tuberosum</i>)	18
2.3.2. Carrots (<i>Daucus carota L.</i>).....	19
2.3.3. Oyster mushrooms (<i>Plaerotus ostreatus</i>)	20
2.3.4. Green beans (<i>Phaseolus vulgaris L.</i>)	21
2.3.5. Shallot (<i>Allium cepa L. var ascalonicum</i>)	22
2.3.6. Garlic (<i>Allium sativum</i>)	23
2.3.7. Celery (<i>Apium graveolens L.</i>)	24



2.3.8. Coconut oil.....	25
2.3.9. Ground chicken (<i>Gallus domesticus</i>).....	25
2.4. Sensory Analysis of Complementary Foods	26
2.5. Hypothesis.....	28
2.5.1. Hypothesis on chemical properties	28
2.5.2. Hypothesis on physical properties	28
2.5.3. Hypothesis on sensory properties	29
2.5.4. Hypothesis on the best cooking method	29
CHAPTER III MATERIALS AND METHODS.....	30
3.1. Materials.....	30
3.2. Equipment	30
3.3. Time and Place of Research	31
3.4. Research Stages.....	32
3.4.1. Formulation of complementary foods.....	32
3.4.2. Analysis of chemical properties.....	42
3.4.3. Analysis of physical properties.....	43
3.4.4. Analysis of sensory properties	44
3.4.5. Determining the best complementary foods cooking method.....	47
3.5. Experimental Design	47
3.6. Statistical Analysis	48
CHAPTER IV RESULTS AND DISCUSSION.....	50
4.1. Analysis of Chemical Properties	50
4.1.1. Water content.....	50
4.1.2. Ash content.....	51
4.1.3. Protein content.....	53
4.1.4. Fat content	56
4.1.5. Carbohydrate content.....	59
4.1.6. Vitamin C content.....	60
4.2. Analysis of Physical Properties	61
4.3. Analysis of Sensory Properties	63
4.3.1. Analysis of sensory properties with hedonic test methods on panels of baby age 6 – 24 months	63
4.3.2. Analysis of sensory properties with hedonic test methods on mother panels	67
4.3.2.1. Color	68



**THE CHEMICAL, PHYSICAL, AND SENSORY PROPERTIES OF COMPLEMENTARY FOODS AS
AFFECTED BY THE COOKING
METHOD**

YUNIAR WIKA P P, Dr. Dwi Larasatie Nur Fibri, S.T.P., M.Sc; Bambang Dwi Wijatniko, S.T.P., M.Agr.Sc., M.Sc.
Universitas Gadjah Mada, 2022 | Diunduh dari <http://etd.repository.ugm.ac.id/>

4.3.2.2. Texture.....	68
4.3.2.3. Aroma	69
4.3.2.4. Taste.....	70
4.3.2.5. Overall	71
4.4. Determination of The Best Cooking Method.....	72
CHAPTER V CONCLUSION AND SUGGESTION	75
5.1. Conclusion.....	75
5.2. Suggestion	76
REFERENCES.....	77
ATTACHMENTS	87