

CURRICULUM VITAE



A. BUTIR-BUTIR PERIBADI <i>(Personal Details)</i>			
Nama Penuh <i>(Full Name)</i>	Norhayati binti Hussain		Gelaran <i>(Title)</i> : Assoc. Prof. Dr.
No. MyKad / No. Pasport <i>(Mykad No. / Passport No.)</i>	Warganegara <i>(Citizenship)</i> Malaysia	Bangsa <i>(Race)</i> Melayu	Jantina <i>(Gender)</i> Perempuan
Jawatan <i>(Designation)</i> Associate Professor (ID SCOPUS: 55823816700)		Tarikh Lahir <i>(Date of Birth)</i>	

Alamat Semasa <i>(Current Address)</i>	Jabatan/Fakulti <i>(Department/Faculty)</i>	E-mel dan URL <i>(E-mail Address and URL)</i>
Fakulti Sains & Teknologi Makanan, Jabatan Teknologi Makanan, UPM Serdang	Fakulti Sains & Teknologi Makanan, Jabatan Teknologi Makanan, UPM Serdang	E-mail: aryatihussain@upm.edu.my

B. KELAYAKAN AKADEMIK <i>(Academic Qualification)</i>			
Nama Sijil / Kelayakan <i>(Certificate / Qualification obtained)</i>	Nama Sekolah Institusi <i>(Name of School / Institution)</i>	Tahun <i>(Year obtained)</i>	Bidang pengkhususan <i>(Area of Specialization)</i>
PhD	University Kebangsaan Malaysia, Bangi, Selangor	2010	Food Science
MSc	University Kebangsaan Malaysia, Bangi, Selangor	2005	Food Science
BSc	University of Strathclyde, Glasgow, United Kingdom	1996	Food Science and Microbiology
Diploma	Universiti Teknologi MARA, Shah Alam, Selangor	1993	Microbiology

C. KEMAHIRAN BAHASA (<i>Language Proficiency</i>)					
Bahasa / Language	Lemah <i>Poor (1)</i>	Sederhana <i>Moderate (2)</i>	Baik <i>Good (3)</i>	Amat Baik <i>Very good (4)</i>	Cemerlang <i>Excellent (5)</i>
English			/		
Bahasa Melayu				/	
Chinese					
Lain-lain (other):					

D. PENGALAMAN SAINTIFIK DAN PENGKHUSUSAN (<i>Scientific experience and Specialisation</i>)				
Organization	Position	Start Date	End Date	Expertise
Malaysia Palm Oil Board	Programme Advisory Committee (PAC)	Jan 2022	Dec 2023	Focus Area of Value Addition
Department of Standards Malaysia, Ministry of International Trade and Industry	Committee	2021	Till now	National and International Sensory Standard
Department of Standards Malaysia, Ministry of International Trade and Industry	Committee	2020	Till now	Honey Specification
Food Safety and Quality Division, Ministry of Health, Malaysia	Committee	2019	Till now	Food Commodity Standards
Lembaga Koko Malaysia	Research Officer	2003	2011	Secondary Cocoa Processing (Chocolate processing)

E. PEKERJAAN (<i>Employment</i>)				
Majikan / Employer	Jawatan / Designation	Jabatan / Department	Tarikh lantikan / Start Date	Tarikh tamat / Date Ended
Marie France Bodyline, Mahkota Parade, Melaka	Nutritionist	-	1999	2001
SBM Food Industries, Merlimau, Melaka	Food Technologist	QC Department	July 1997	December 1998

CPC/AJI (M) Sdn. Bhd., Segambut, Kuala Lumpur	Food Technologist	R&D Department	December 1996	June 1997

F. ANUGERAH DAN HADIAH <i>(Honours and Awards)</i>				
Name of awards	Title	Award Authority	Award Type	Year
Academic Awards	A. PhD scholarship from -Tabung Pembangunan Sains dan Teknologi.	Jabatan Perkhidmatan Awam, Malaysia	National	2007-2010
	B. BSc scholarship	MARA	National	1994 - 1996
Non-Academic Awards	A. Anugerah Perkhidmatan Cemerlang	Universiti Putra Malaysia	National	2012-2019
	B. Anugerah Perkhidmatan Cemerlang	Lembaga Koko Malaysia.	National	2007
	C. Peserta Cemerlang Kursus Induksi Modul Umum	UiTM	National	2004
Awards of Merit	A. Gold award-Innovation (Pinezer 3 in 1- Pineapple core-based meat tenderizer)	Melaka International Intellectual Exposition 2019	International	2019
	B. Hold 18 Copyrights (Product developments)	UPM	National	2016
	C. Best Oral Presenter at 6th International Conference on Biotechnology and	International Conference on Biotechnology and Food Science	Oral Competition (ICBFS 2015), Istanbul Turkey	2015

	Food Science, Istanbul, Turkey			
	D. Silver Medal, Malaysia Technology Exhibition	Malaysia Association of Research Scientist	Malaysia Technology Exhibition (MTE)	2007
	E. Bronze Medal. Muhammad Anas O., Norhayati H., Suhaimi M., Loong Y.Y & Mohd Yazid A.M. An in vitro study of the synbiotic potential of a probiotic preparation containing bifidobacterium pseudocatenulatum G4 and prebiotic (inulin and chocolates).	UPM	Poster Competition, UPM	2007
	F. International Patent No.: PCT/ MY 2007/000023: Prebiotic chocolate and method for producing the same	PCT		2007
Academic Journal REVIEWERS (International)	Food Chemistry (Elsevier) Journal of the American Oil's Chemists' Society (Wiley) Journal of Oleo Science (Japan Oil Chemists' Society) Food Research International (Elsevier) Journal of Food Processing and Preservation (Wiley) Industrial and Engineering Chemistry Research (acs.org) Trends in Food Science and Technology (Elsevier)			

G. SENARAI PENERBITAN (Sila masukan nama pengarang, tajuk, nama jurnal, jilid, muka surat dan tahun diterbitkan) *(List of publications – author (s), title, journal, volume, page and year published)*

Journal	Norhayati Hussain , Aisyah Zafirah Md Dali, Nursabrina Munawar. 2021. Effects of fat contents and particle size of cocoa nibs on alkaloid composition, antioxidant activities, and volatile compound of concentrated cocoa drink. Journal of Food Processing and Preservation. https://doi.org/10.1111/jfpp.15748 . Q3
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Norhayati Hussain, Izzreen Ishak, Baizura Aya Putri Agus, Nor Fatin Atikah Samah. 2021. Effects of different stabilization conditions and extraction methods (Soxhlet and ultrasonic-assisted) on quality of rice bran oil. *Emirates Journal of Food and Agriculture*. 33(3): 220-227. Q3

Izzreen Ishak, **Norhayati Hussain**, Ranil Coorey, Maaruf Abd Ghani. 2021 Optimization and characterization of chia seed (*Salvia hispanica* L.) oil extraction using supercritical carbon dioxide. *Journal of CO₂ Utilization*. 45 (2021): 101430. Q1

Norhayati Hussain, Najjah Azhar, Nur Fathiah Abdul Razak. 2021. Stability of chili padi bara (*Capsicum frutescens* L.) paste containing calamansi lime during storage and its tenderizing effect on chicken fillet. *Journal of Food Measurement and Characterization*. 15: 5150–5158. <https://doi.org/10.1007/s11694-021-01086-3>. Q3

Agus, B.A.P., **Hussain, N.**, Selamat J. 2020. Quantification of PAH4 in roasted cocoa beans using QuEChERS and dispersive liquid-liquid micro-extraction (DLLME) coupled with HPLC-FLD. *Journal Food Chemistry*. 303:125398. Q1

Hussain, N., Abd Rahim, N.A. and Azhar, N. 2020. Physicochemical properties of chili padi Centil (*Capsicum frutescens*) powder dried at different drying temperatures. *Food Research*. 139-144. Scopus

Nursabrina Munawar, Najjah Azhar, Nur Syahirah Rohaizad and Norhayati Hussain (2020). Characterization of Watermelon Rind Powder Using Foam Mat Drying with Different Types of Foaming Agents and Temperatures. *Asian Journal of Fundamental and Applied Sciences*, 1-10.

Hussain, N., Ishak, I., Sulaiman, R., Fauzi, N.M. and Coorey, R. 2020. Influence of processing conditions on rheological properties of aqueous extract chia (*Salvia hispanica* L.) mucilage. *Food Research* 4 (Suppl. 1): 227 – 236. Scopus

Fakhlai, R., Rozzamri, A. and **Hussain, N.** 2020. Composition, color and antioxidant properties of cocoa shell at different roasting temperatures. *Food Research* 4 (3): 585 – 593. Scopus

Halimatun Sa'adiah, A. H., Jinap, S. and **Norhayati, H.** 2019. Fractionation of coconut oil via supercritical fluid extraction for production of cocoa butter substitute. *International Food Research Journal*. 26(3): 783-790). Q4

Abdul Halim, H.S., Selamat, Mirhosseini, S.H. and **Hussain, N.** 2019. Sensory preference and bloom stability of chocolate containing cocoa butter substitute from coconut oil. *Journal of the Saudi Society of Agricultural Sciences*. 18(4): 443-448. Q4

Roiaini Mohamad, Baizura Aya Putri Agus and **Norhayati Hussain**. 2019. Changes of Phytosterols, Rheology, Antioxidant Activity and Emulsion

Stability of Salad Dressing with Cocoa Butter During Storage. Food Technology and Biotechnology. 57(1): 59-67. Q2

Norhayati H., Izzreen I., Nurhazirah M.H., Gloria P.K.L. 2019. Comparison of bioactive compounds and sensory evaluation on edible flowers tea infusion. Italian Journal of Food Science. 31: 264-273. Q3

Hussain, N., Azhar, N., Rajoo, S.G.S. 2019. Effects of thermosonication on watermelon rind-honey beverage. Italian Journal of Food Science. 31(4), pp. 631-651. Q3.

Sari, A.R., Rahman, R.A., Shukri, R., **Norhayati, H.** 2019. Improvement process of partially cooked corn grit (PCCG) preparation. International Food Research Journal. 26(2), pp. 537-546. Q4

Norhayati Hussain, Izzreen Ishak, Muhammad Aiman Ahmad Kamal, Ety Syarmila Ibrahim Khushairay and Baizura Aya Putri Agus. 2019. Peeling of key lime (*Citrus aurantifolia*) fruit aided with vacuum infusion, different levels of pectinase concentration and soaking time. Journal of Food Measurement and Characterization. 13(3), pp. 2095-2105. Q3

Hussain, N., Ishak, I., Abdullah, M.F., Rauh, A.A., Azhar, N. 2019. Water soluble hydrocolloid from basil seed (*Ocimum basilicum* L.) mucilage Malaysian Applied Biology. 48(2), pp. 97-101

Norhayati, H., Izzreen, I. and Tan Hooi, P. 2019. Effects of pasteurization and different concentrations of xanthan gum on honey beverage. Food Research 3 (4): 325 – 332. Scopus

Kam, W.-Y.J., Abas, F., **Hussain, N.**, Mirhosseini, H. 2019. Comparison of crude extract from durio zibethinus M. (durian) leaf waste via ultrasound-assisted extraction and accelerated solvent extraction: antioxidant activity and cytotoxicity. Natural Product Research. 1937-1941. Q2

Norhayati Hussain, Baizura Aya Putri Agus, Aisyah Zafirah Md Dali, How Wee Teng. 2018. Determination of Functional Properties of Cocoa Waste from Concentrated Cocoa Drink. Journal of Food Measurement and Characterization 12(3): 2094-2102. Q3

Baizura Aya Putri Agus, Nurul Nadzirah Mohamad, **Norhayati Hussain**. 2018. Composition of Unfermented, Unroasted, Roasted cocoa beans and Cocoa shells from Peninsular Malaysia. Journal of Food Measurement and Characterization. 12:2581–2589. Q3

Razak, R. A., Karim, R., Sulaiman, R. and **Hussain, N.** 2018. Effects of different types and concentration of hydrocolloids on mango filling. International Food Research Journal 25(3): 1109-1119. Q4

Aisyah Zafirah, M. D., Roselina, K., Jinap, S. and **Norhayati, H.** 2018. Effects of fat content and grinding level of cocoa nibs on physicochemical

characteristics of espresso cocoa. *International Food Research Journal*. 25(3): 1239-1245. Q4

Norhayati Hussain, Baizura Aya Putri Agus, Siti Nur Fifi Abdul Rahim, Halimatun Sa'adiyah Abdul Halim. Comparison of quality characteristics between compound and pure milk chocolate. *MOJ Food Processing & Technology*. 2018;6(3):292–296.

Nur Sadrina Mohamad, Rabiha Sulaiman, Lai Oi Ming, **Norhayati Hussain**. Comparison between conventional and alternative peeling methods on peeling efficiencies of Malaysian 'Chok Anan' mango (*Mangifera indica* L.) fruit. *International Food Research Journal* 24(5): 1934-1940. Q4

N.H Mahazar, Z. Zakuan, **H. Norhayati**, A.N MeorHussin and Y. Rukayadi. 2017. Optimization of Culture Medium for The Growth of *Candida* Sp. and *Blastobotrys* Sp. as Starter Culture in Fermentation of Cocoa Beans (*Theobroma Cacao*) using Response Surface Methodology (RSM). *Pakistan Journal of Biological Sciences*.

Ida Madiha Y., Rukayadi Y., and **Norhayati H.** 2017. Effects of extraction condition on yield, total phenolic contents and antibacterial activity of methanolic *Cinnamom zeylanicum* Blume leaves extract. *International Food Research Journal*. 24(2): 779-786. Q4

S.A. Mat, I.S. Mohd Daud, M.H. Mohamad Rojie, N. Hussain and Y. Rukayadi. 2016. Effects of *Candida* sp. and *Blastobotrys* sp. Starter on Fermentation of Cocoa (*Theobroma cacao* L.) Beans and Its Antibacterial Activity. *Journal of Pure and Applied Microbiology*. Vol. 10(4), p. 2501-2510. Q4

Choon Yoong Cheok, Noranizan Mohd Adzahan, Russly Abdul Rahman, Nur Hanani Zainal Abedin, **Norhayati Hussain**, Rabiha Sulaiman & Gun Hean Chong. 2016. Reviews: Current Trends of Tropical Fruit Waste Utilization. *Critical Reviews in Food Science and Nutrition*. doi:10.1080/10408398.2016.1176009. Q1

Roiaini, M., Seyed H. M., Jinap, S. and **Norhayati, H.** 2016. Effect of extraction methods on yield, oxidative value, phytosterols and antioxidant content of cocoa butter. *International Food Research Journal* 23(1): 47-54. Q4

Roiaini, M., Ardiannie, T. and **Norhayati, H.** 2015. Physicochemical properties of canola oil, olive oil and palm olein blends. *International Food Research Journal* 22(3): 1228-1234. Q4

H. Norhayati & M Roiaini. 2015. Effect of Different Solvents on Phytosterols and Antioxidant Activity of Cocoa Beans. *International Journal of Food Engineering*. 1:1:18-22. Q4

Abdul Aris, M. H., Lee, H. Y., **Hussain, N.**, Ghazali, H., Mahyudin, N. A.

	<p>Nordin, W. N. and Mahyudin N.A. 2015. Effect of Vietnamese coriander (<i>Persicaria odorata</i>), turmeric (<i>Curcuma longa</i>) and asam gelugor (<i>Garcinia atroviridis</i>) leaf on the microbiological quality of <i>gulai tempoyak</i> paste. International Food Research Journal 22(4): 1657-1661. Q4</p> <p>Mahazar, N. H., Sufian, N. F., Meor Hussin, A. S., Norhayati, H., Mathawan, M. and Rukayadi, Y. 2015. <i>Candida</i> sp. as a starter culture for cocoa (<i>Theobroma cacao</i> L.) beans fermentation. International Food Research Journal 22(5): 1783-1787. Q4</p> <p>H. Norhayati & A. Mohd Khan. 2014. Sensory Quality of Pilot Scales Prebiotic Chocolates in Malaysia. Sains Malaysiana. 43(9): 1333-1344. Q4</p> <p>Siewsee Ng, Ola Lasekan, Kharidah Muhammad, Rabiha Sulaiman and Norhayati Hussain. 2014. Effect of roasting conditions on color development and Fourier transform infrared spectroscopy (FTIR-ATR) analysis of Malaysian-grown tropical almond nuts (<i>Terminalia catappa</i> L.). Chemistry Central Journal. 8(55):1-11. Q2</p> <p>Norhayati H, Rasma Suzielawanis I. & Mohd Khan A. 2013. Effect of Storage Conditions on Quality of Prebiotic Dark Chocolate. Mal J Nutr. 19(1): 111 – 119.</p> <p>Norhayati H., Muhammad Anas. O. & Mohd Khan A. 2012. Kesan Penggunaan Inulin dan Coklat Berinulin Terhadap Pertumbuhan <i>in vitro</i> Bifidobakteria. Sains Malaysiana. 41(10): 1223–1231. Q4</p> <p>Norhayati H., K.Rosmin, I.Rasma Suzielawanis, O.Muhammad Anas and A. Mohd Khan. 2008. Effects of prebiotic chocolates on some physicochemical properties, intestinal microflora of rat's digesta and their serum profile. Journal of Science and Technology in the Tropics. 4(1): 39-46.</p> <p>Norhayati H, K.Rosmin, I.Rasma Suzielawanis, Yazid A.M. and A. Mohd Khan. 2008. Effect of inulin on texture, melting profile and sensory properties of sugar free milk chocolate. Malaysian Cocoa Journal. 4:20-24</p> <p>Muhammad Anas, O., Mohd Yazid A.M, Norhayati, H., Loong, Y.Y & Suhaimi, M. 2007. Fermentation of chocolate with inulin by bifidobacteria strains. World Journal Of Microbiology and Biotechnology.</p>
Books/Monographs	Norhayati Hussain. 2014. Ke arah penghasilan coklat bermutu- skala loji pandu. Penerbit Universiti Putra Malaysia.
Chapter in book	<p>Norhayati Hussain, Izzreen Ishak, Ranil Coorey, Ma'Aruf Abd Ghani, and Tan Chin Ping. 2021. A Centum of Valuable Plant Bioactives (1st Ed.) In Chapter 31: <i>Tocopherols</i>. Academic Press, UK. ISBN: 978-0-12-822923-1. pg 707-727.</p> <p>Norhayati Hussain, Nurfaiah Aqilah and Najjah Azhar. 2020. A</p>

	<p>comprehensive guide to processed foods. In Chapter 10: <i>Quality attributes of watermelon rind with honey beverage processed using pasteurisation and thermosonication</i>, Nova Science Publishers Incorporation, USA. ISBN 978-1-53617-308-6. pg 253</p> <p>Rodziah Atan, Mohd Daud Awang, Fatin Nur Majdina Nordin. 2018. Halal Industry: Food, Non Food & Halal Image. In Part 3: Progress and challenges in halal industry. Application of selected emulsifiers in chocolate: A short review. Laboratory of Halal Policy and Management, Halal Products Research Institute, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor Darul Ehsan, Malaysia. ISBN 978-967-12398-4-1. pg 102-106.</p> <p>Chye F.Y & Lee J.S. 2010. Current research in food science and nutrition. In Chapter 9: <i>Effect of prebiotics on the physical properties and sensory evaluation of milk chocolates</i>. Penerbit Universiti Malaysia Sabah. pg 97-108.</p>
<p>Proceedings</p>	<p>Nur Sabrina M., Najjah A. Nur Syahirah R. and Norhayati H. 2020. Characterization of watermelon rind powder using foam mat drying with different types of foaming agents and temperatures. Kuala Lumpur International Conference and Management, Education and Technology, (KLIMET 2020), Malaysia</p> <p>Norhayati H. and Nurul Amielia Liza M. Ali. 2019. Effects of Different Anti-Browning Agents on Minimally Processed Banana (Musa Aa Cv Mas and Musa Aab Cv Rastali). International Food Research Conference, Putrajaya.</p> <p>Hussain, N., Abd Rahim, N.A. and Azhar, N. 2019. Physicochemical properties of chili padi Centil (<i>Capsicum frutescens</i>) powder dried at different drying temperatures. Global Halal Sphere Conference, ISTAC-IIUM, Kuala Lumpur.</p> <p>Baizura Aya Putri Agus and Norhayati Hussain. 2018. Development of Espresso Cocoa from Ghana Cocoa Nibs. International conference on agriculture, animal sciences & food technology, Terengganu.</p> <p>H Norhayati, I Izzreen, R. Nurul Syafizan, M Nurul Husna, A G Maaruf. Effects of Par-frying and Calcium Propionate on the Quality of Frozen Curry Puff. 2018. 2nd International Conference on Applied Sciences and Industrial Technology 2018</p> <p>Norhayati, H, Izzreen, I., Najjah, A., Anisah, A.B., Muhammad, F.A., Ety, S.I.B. and Maaruf, A.G. 2018. Water Soluble Hydrocolloid from Basil Seed (<i>Ocimum basilicum</i> L.) Mucilage. International Halal Ecosystem Conference (IHEC) 2018;13th - 15th Nov 2018; Kompleks Kedekanan FST UKM</p> <p>Norhayati Hussain. 2017. The application of science on the determination of halal status. Halal Food Certification Workshop, Istanbul Sebahatin Zaim</p>

University.

Ida Madiha Yusoff, Yaya Rukayadi & **Norhayati Hussain**. 2017. Antibacterial Activities of Cinnamon zeylanicum Blume Leaves Extract against Salmonella Typhimurium and Listeria monocytogenes. International Postgraduate Symposium 2017.

Halimatun Sa'adiah Abdul Halim, Siti Nurfifi Abdul Rahim & **Norhayati Hussain**. 2015. Quality parameter of chocolate containing cocoa butter substitute. 2nd International Conference on Crop Improvement.

Ida Madiha Yusoff, Yaya Rukayadi & **Norhayati Hussain**. 2015. Optimisation of extraction yield, total phenolic contents and antibacterial activity of methanolic cinnamon zeylanicum blume leaves extract using Response Surface Methodology (RSM). 2nd International Conference on Crop Improvement.

Nur Sadrina Mohamad, Rabiha Sulaiman, Lai Oi Ming & **Norhayati Hussain**. 2015. Effect of peeling methods on physicochemical characteristics of Malaysia mango puree. 2nd International Conference on Crop Improvement.

Norhayati Hussain & Roiaini Mohamad. 2015. Effect of Different Solvents on Phytosterols and Antioxidant Activity of Cocoa Beans. 5th International Conference on Biotechnology and Food Science. Istanbul, Turkey.

Norhayati Hussain. 2014. Application of Emulsifiers in Chocolate: A Short Review. Malaysia International Halal Research & Education Conference 2014.

Hussain N., Tukimin A., Yusoff I.M., & Mohamad R. 2014. Physico-chemical characteristics of canola, olive and palm olein blends. 47th Annual AIFST Convention & Exhibition.

M Roiaini, M Hamed, S Jinap and **H Norhayati**. 2014. Effect of different extraction methods on yield, phytosterol composition and antioxidant activity of Malaysia cocoa beans. The 3rd International Symposium on Processing of Foods, Vegetables and Fruits.

AR Raihana, K Roselina, S Rabiha and **H Norhayati**. 2014. Effect of hydrocolloids in mango filling stored at different storage conditions. The 3rd International Symposium on Processing of Foods, Vegetables and Fruits.

AZ Md Dali, R Karim, J Selamat and **N Hussain**. 2014. Influence of fat in cocoa nibs and grinding on development of espresso cocoa drink. The 3rd International Symposium on Processing of Foods, Vegetables and Fruits.

Nur Sadrina Mohamed, Raihana Abdul Razak, **Norhayati Hussain**, and Roselina Karim. 2014. Improvement and shelf life extension of fresh creams chocolate filling for Tolaal Enterprise. Persidangan Kebangsaan Kedua

	<p>Program Pemindahan Ilmu (KTP 02).</p> <p>Norhayati H., Siti Hidayat, Aisyah Zafirah & Roselina Karim. 2013. Effect of storage conditions and grinding sizes of cocoa nibs on cocoa espresso. 2nd World Congress of Food Science and Technology-2013.</p> <p>Norhayati H., Raihana Abdul Razak, Nur Sadrina Mohamed & Roselina Karim. 2013. Improvement and shelf life extension of fresh creams chocolate filling for Tolaal Enterprise. Persidangan Kebangsaan Pertama Program Pemindahan Ilmu (KTP 01).</p> <p>Norhayati H., Yaya R. & Mohd Khan A. 2012. Shelf-life stability of milk chocolate containing inulin. 4th International Conference and Biotechnology Advancing life sciences for health (anti aging development in particular) and food security.</p> <p>Norhayati H., Rosmin K. & Mohd Khan A. 2012. Sensory evaluation and market survey of prebiotic chocolates produced by pilot plant scale in Malaysia. A sense of inspiration (5th European Conference on Sensory and Consumer Research).</p> <p>Mohd Khan A., Norhayati H. & Rosmin K. 2010. Penilaian ciri-ciri fizikokimia, penerimaan dan hayat simpanan coklat prebiotik pra-komersil. Proceeding of International Seminar on Food and Agricultural Sciences.</p> <p>Norhayati H., Rosmin K., ¹Mohd Khan A. & ² Yazid A.M. 2007. Effect of a prebiotic on texture, melting profile and sensory properties of sugar free milk chocolate. Proceeding of the 10th Asean Food Conference 2007. Pg. 154.</p> <p>Norhayati H., Rosmin K., ¹Mohd Khan A. & ² Yazid A.M. 2007. Application of a prebiotic in milk chocolate. 2007. 12th Asean Chemical Congress. Pg. 174.</p> <p>Proceeding - Norhayati Hussain, Rasmusuzielawanis Ismail and Mohd Yazid Abdul Manap. Nutritious Chocolate. 2006. Proceeding of The National Conference on Food Science and Nutrition 2006, 13-14 December 2006, Universiti Malaysia Sabah, Kota Kinabalu, Sabah.</p> <p>Proceeding – Norhayati H. and A.M Yazid. 2005. Application of prebiotic in chocolate. Proceeding of The Malaysian International Cocoa Conference, 18-19 July 2005. Sunway Pyramid Convention Centre, K. Lumpur.</p>
Other publications	-
Computer software	-

H. PROJEK PENYELIDIKAN TERDAHULU <i>(Past Research Project)</i>					
Project No.	Project Title	Role	Year	Source of	Status

				fund	
9643600	Characterization and tocopherols bioavailability of chia seed oil extract from green technology supercritical fluid	Project leader	April 2018-2021	GP (RM50,000)	On going
9541800	Effect Of Different Roasting Conditions On Polycyclic Aromatic Hydrocarbons (Pah4) Content In Cocoa Bean	Project leader	Jun 17- Mei19	IPB (RM 88,000)	On going
9537200	Characterisation and in vitro bioavailability of chia seed oil in omega 3 and 6 fatty acids fractionated by supercritical fluid extraction	Project leader	1 Jun 2017 – 1 Jun 2020	IPS (RM 20,000)	On going
-	Improvement of frozen curry puff skin	Project leader	Jan 2016- September 2016	PPRN (RM27,300)	Completed
-	Product Improvement: 1. Crab Noodle Paste 2. Vegetable Noodle	Co-Researcher	Jan 2016- September 2016	PPRN (RM60,000)	Completed
-	Extension shelf life of sagu berkrim, dadih, muruku and jelly kelapa	Co-Researcher	Jan 2016- September 2016	PPRN (RM30,000)	Completed
UPMCS2016	Development of three functional food products	Co-Researcher	2015-2017	Tropica Beauty Sdn. Bhd.	On going

	from virgin oil			(RM90,000)	
<i>03-01-04-SF1822</i>	Recovery of lauric free fractions from palm kernel stearin and its application as cocoa butter substitute	Project leader	1 May 2014-2015	Science fund (RM40,000)	Completed
<i>GP/IPS/2013/9399840</i>	Improvement of peeling methods for mango puree production	Project leader	1 January 2014-31 December 2015	Geran UPM 2013 (RM15,000)	Completed
<i>GP/IPS/2013/9399841</i>	Development of salad dressing containing optimum phytosterols from cocoa butter using supercritical fluid extraction (SFE)	Project leader	1 January 2014-31 December 2015	Geran UPM 2013 (RM15,000)	Completed
<i>UPMCS2012-56</i>	Optimization of yeast starter culture for cocoa fermentation	Project leader	1 October 2012- 30 September 2013	Barry Callebaut Services Asia Pacific Sdn Bhd (RM79,200)	Completed
<i>I-eco/68 (UPM-12)</i>	Improvement and shelf life extension of fresh creams chocolate filling for Tolaal Enterprise	Project leader	30 August 2012 – September 2014	Program Pemindahan Ilmu (KTP) (RM113,775)	Completed
<i>TF0310F095</i>	Pilot Manufacturing of "Halal" Prebiotic Chocolate.	Project leader	20 May 2011- September 2014	Technofund (RM 800,000)	Completed
<i>02-05-11-1588RU</i>	Production of low fat cocoa granules for	Project leader	23 December 2011-27	RUGS 5 (RM30,000)	Completed

	cocoa bean espresso beverage		December 2013		
IRPA 03-04-07-10002-EAR	Development of Prebiotic Chocolates	Project leader	2005-2008	IRPA	Completed

I. ID PUBLISHING (<i>Publishing ID</i>)		
	Author ID	Name
Scopus	55823816700	Norhayati Hussain
ORC ID	http://orcid.org/0000-0002-0601-2454	Norhayati Hussain
Web of Science ID		
Researcher ID		
Others		

J. RANGKAIAN SOSIAL (<i>Social Networking</i>)	
Facebook	http://www.facebook.com/Norhayati Hussain
LinkedIn	http://www.linkedin.com/in/norhayati-hussain-aa746414a
Researchgate	https://www.researchgate.net/profile/Norhayati_Hussain
Academia	-
Google Scholar	Norhayati Hussain
Blog	-
Website url	-
Others	-

K. PENYELIAAN PELAJAR MASTER/ PHD (<i>Master/PhD Student Supervisory</i>)				
No/ Bil.	Tahun/ Year	Nama/ Name	Tajuk projek/ Project name	Tahap/ Level
1.	2020	Shanti Dwita Lestari	Malaysian budu: From processing to physicochemical, microbiological and bio-accessibility of bioactive compounds	PhD
2.	2020	Komati Rajentran	Characterisation and bio-accessibility of optimised Enzyme-Assisted Chia Mucilage using Different Drying Conditions and Particle Sizes	Master

3.	2019	Nur Sabrina Binti Munawar	Effects of processing on metabolites, quality and toxicity of selected herbal leaf and it's infusion	PhD
4.	2019	Najjah Binti Azhar	Characterization of bioactive compounds in banana (<i>Musa L.</i>) peel and comparison between different extraction methods	Master
5.	2017	Izzreen Bin Ishak	Characterization of fat soluble antioxidant in chia seed oil extracted by green technology supercritical fluid and its application in margarine	PhD
6.	2014	Baizura Aya Putri Bt Agus	Effect of roasting Malaysia cocoa bean on PAHs formation	Master/ Completed
7.	2014	Ida Madiha Yusoff	Antimicrobial activities of cinnamon leaves extract (<i>Cinnamom zeylanicum Blume</i>) ultrasonic assisted extraction against selected foodborne pathogens	Master/ Completed
8.	2013	Halimatun Sa'adiyah Binti Abdul Halim	Effect of pressure and temperature on the fractionation of coconut oil by supercritical fluid extraction and its application as cocoa butter substitute	Master/ Completed
9.	2013	Nur Sadrina Binti Mohamad	Effects of manual, chemical and enzymatic peeling methods towards Malaysia mango (<i>Mangifera Indica L. cv. Chok Anan</i>) puree properties	Master/ Completed
10.	2012	Aisyah Zafirah Binti Md Dali	Effect of fat content and grinding process on development of espresso cocoa drink	Master/ Completed
11.	2012	Raihana Binti Abdul Razak	Effects of hydrocolloids on mango filled chocolate	Master/ Completed
12.	2012	Roiani Binti Mohamad	Effect of different solvent and extraction methods on phytosterols and antioxidant activity of cocoa butter and the application of the cocoa butter in	Master/ Completed

			salad dressing	
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