

ENHANCING STUDENTS' INTERACTION IN LEARNING WITH BYOD



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27TH FEBRUARY, 2015.

14:00 – 15:00

D3-LP-02



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on behalf of

Teaching Development Grants (TDG) Project, “Bring Your Own Device (BYOD) for reflective engagement of learners in digital classrooms”

<http://tdgbyod2013.ied.edu.hk> (Please browse with Chrome or Firefox.)

Principal Project Supervisors: Prof. Kong Siu Cheung (MIT), Prof. Chung Wai Yee Joanne (HPE), Dr. Song Yanjie (MIT)



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BYOD APPLIED IN 2 COURSES

■ HCS 4033 Integrative Nutrition

■ HCS 4038 Food Safety Education



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SUMMARY

- HCS 4033 Integrative Nutrition
- Semester 2, 2013/2014
- Learning Outcomes:
 - School lunch review
 - Healthy school lunch design
 - Peer Review

TEACHING PLAN WITH BYOD



- Introduce the criteria in assessing primary school lunch
- Nutritional Guidelines on Lunch for Students

(Centre for Health Protection, December, 2010)



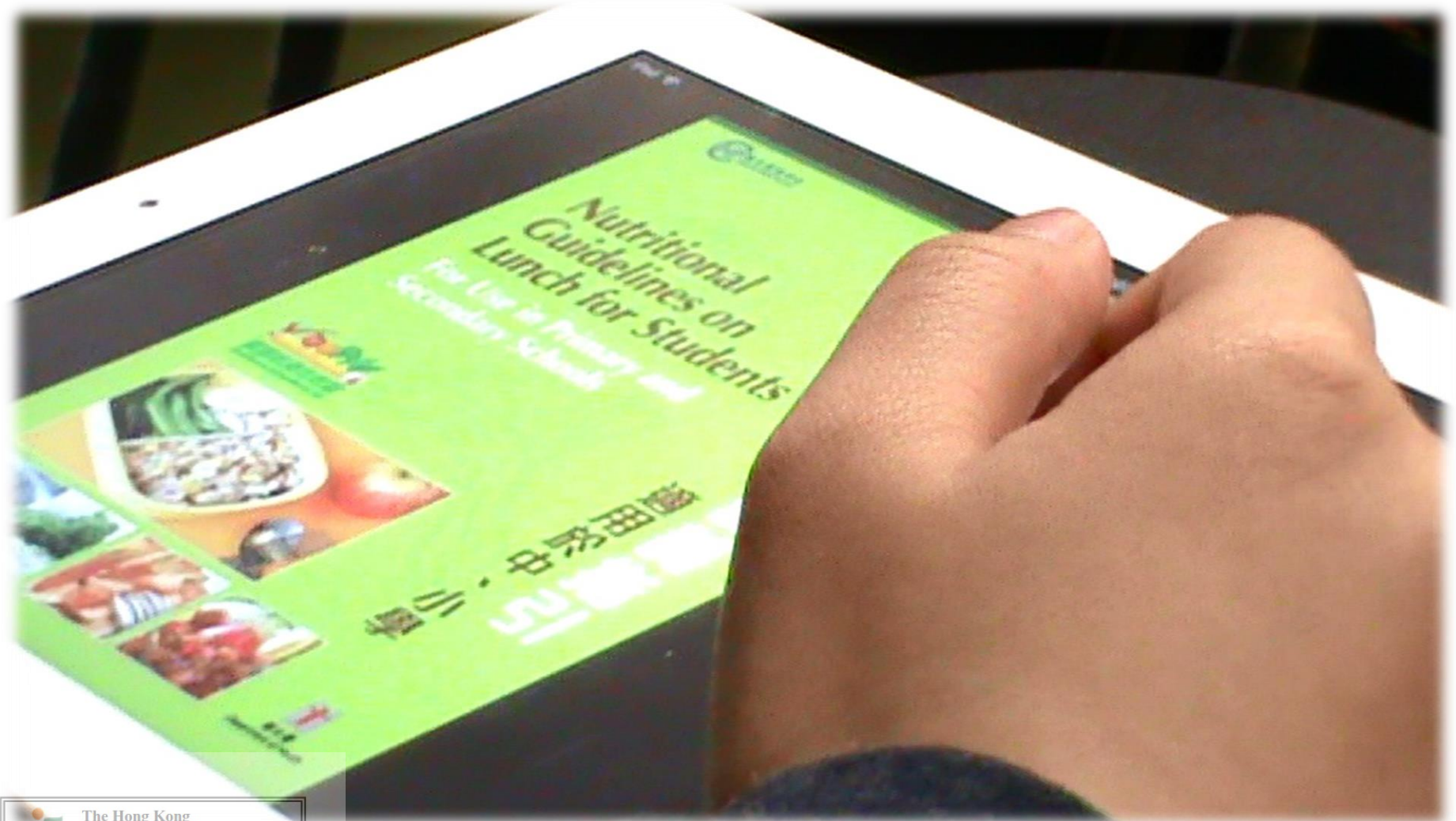
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■ A month school lunch ordering menu from one subsidized primary school was given.

Each group of students was assigned 3 days menu for critique and review.

GROUP DISCUSSION



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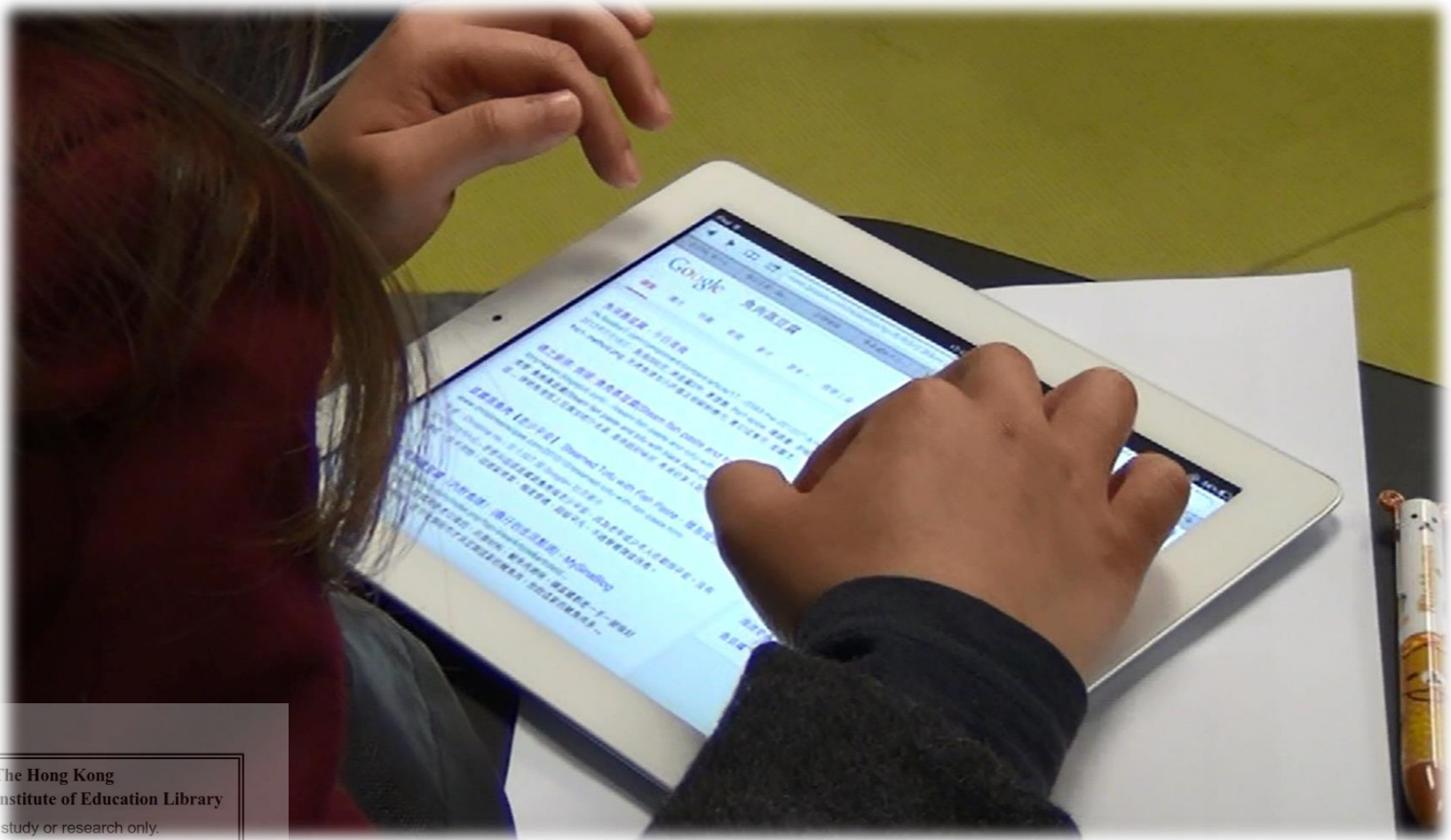
COMMUNICATIONS



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SEARCHING INFORMATION ON INTERNET



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Patient Categories	Breakfast		Lunch				Dinner				Daily			
	Congee/ Pasta (g)	Bread/ Equivalent (g)	Rice (g)	Entrée (g)	Meat (g)	Veg (g)	Rice (g)	Entrée (g)	Meat (g)	Veg (g)	Fruit (serving)	Milk (ml)	Bread/ Equivalent (g)	Cooking oil (g)
Paediatric 6-12 months	250		80- 120	40-50	15-20	60	80- 120	40-50	15- 20	60	1/2-1	*	20	5-10
Paediatric 1-3 years	250	20	100- 200	60-80	20- 30	80	100- 200	60-80	20- 30	80	1	480	20	20
Paediatric 3-6 Years	500	40	200	80-120	30- 45	120	200	80-120	30- 45	120	1	480	40	20
Paediatric 6-12 Years	500	40	200- 300	120-200	45- 75	1250	200- 300	120-200	45- 75	1250	1-2	480	80	30

Meat – it is part of the entrée

Equivalent amount of pasta/ noodle/ potato can be served to replace rice

All Weights given are cooked edible weight

* Infant formula for patient aged 6-12 months

Dietary Reference Intakes (DRI)

Recommended Nutrient Intake (RNIs) or Adequate Intakes (AIs) for Groups Chinese Nutrition Society

Life Stage Group (yr)	Vit A (µgRE/d)		Vit C (mg/d)	Vit D (µg/d)	Vit E (mgα-TE/d)	Thiamin (mg/d)		Riboflavin (mg/d)		Niacin (mgNE/d)		Pantothenic Acid (mg/d)	Vit B6 (mg/d)	Biotin (µg/d)	Folate (µgDFE/d)	Vit B12 (µg/d)	Calcium (mg/d)
	RNI		RNI	RNI	AI	RNI		RNI		RNI		AI	AI	AI	RNI	AI	AI
0~	400		40	10	3	0.2		0.4		2		1.7	0.1	5	65	0.4	300
0.5~	400		50	10	3	0.3		0.5		3		1.8	0.3	6	80	0.5	400
1~	500		60	10	4	0.6		0.6		6		2.0	0.5	8	150	0.9	600
4~	600		70	10	5	0.7		0.7		7		3.0	0.6	12	200	1.2	800
7~	700		80	10	7	0.9		1.0		9		4.0	0.7	16	200	1.2	800
11~	700		90	5	10	1.2		1.2		12		5.0	0.9	20	300	1.8	1000
	Males	Females				Males	Females	Males	Females	Males	Females						
14~	800	700	100	5	14	1.5	1.2	1.5	1.2	15	12	5.0	1.1	25	400	2.4	1000
18~	800	700	100	5	14	1.4	1.3	1.4	1.2	14	13	5.0	1.2	30	400	2.4	800
50~	800	700	100	10	14	1.3	1.3	1.4	1.4	13	13	5.0	1.5	30	400	2.4	1000
Pregnancy																	
1st trimester	800		100	5	14	1.5		1.7		15		6.0	1.9	30	600	2.6	800
2nd trimester	900		130	10	14	1.5		1.7		15		6.0	1.9	30	600	2.6	1000
3rd trimester	900		130	10	14	1.5		1.7		15		6.0	1.9	30	600	2.6	1200
Lactation	1200		130	10	14	1.8		1.7		18		7.0	1.9	35	500	2.8	1200



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Life Stage Group (yr)	Choline (mg/d)	Chromium (µg/d)	Copper (mg/d)	Fluoride (µg/d)	Iodine (µg/d)	Iron (mg/d)		Magnesium (mg/d)	Manganese (mg/d)	Molybdenum (µg/d)	Phosphorus (mg/d)	Potassium (mg/d)	Selenium (µg/d)	Sodium (mg/d)	Zinc (mg/d)	
	AI	AI	AI	AI	RNI	AI	AI	AI	AI	AI	AI	AI	RNI	AI	RNI	
0~	100	10	0.4	0.1	50	0.3		30	/	/	150	500	15	200	1.5	
0.5~	150	15	0.6	0.4	50	10		70	/	/	300	700	20	500	8.0	
1~	200	20	0.8	0.6	50	12		100	/	15	450	1000	20	650	9.0	
4~	250	30	1.0	0.8	90	12		150	/	20	500	1500	25	900	12.0	
7~	300	30	1.2	1.0	90	12		250	/	30	700	1500	35	1000	13.5	
						Males	Females								Males	Females
11~	350	40	1.8	1.2	120	16	18	350	/	50	1000	1500	45	1200	18.0	15.0
14~	450	40	2.0	1.4	150	20	25	350	/	50	1000	2000	50	1800	19.0	15.5
18~	450	50	2.0	1.5	150	15	20	350	3.5	60	700	2000	50	2200	15.0	11.5
50~	450	50	2.0	1.5	150	15	15	350	3.5	60	700	2000	50	2200	11.5	11.5
Pregnancy																
1st trimester	500	/	/	/	200	15		400	/	/	700	2500	50	2200	11.5	
2nd trimester	500	/	/	/	200	25		400	/	/	700	2500	50	2200	16.5	
3rd trimester	500	/	/	/	200	35		400	/	/	700	2500	50	2200	16.5	
Lactation	500	/	/	/	200	25		400	/	/	700	2500	65	2200	21.5	

(Hospital Authority Head Office, 2014)



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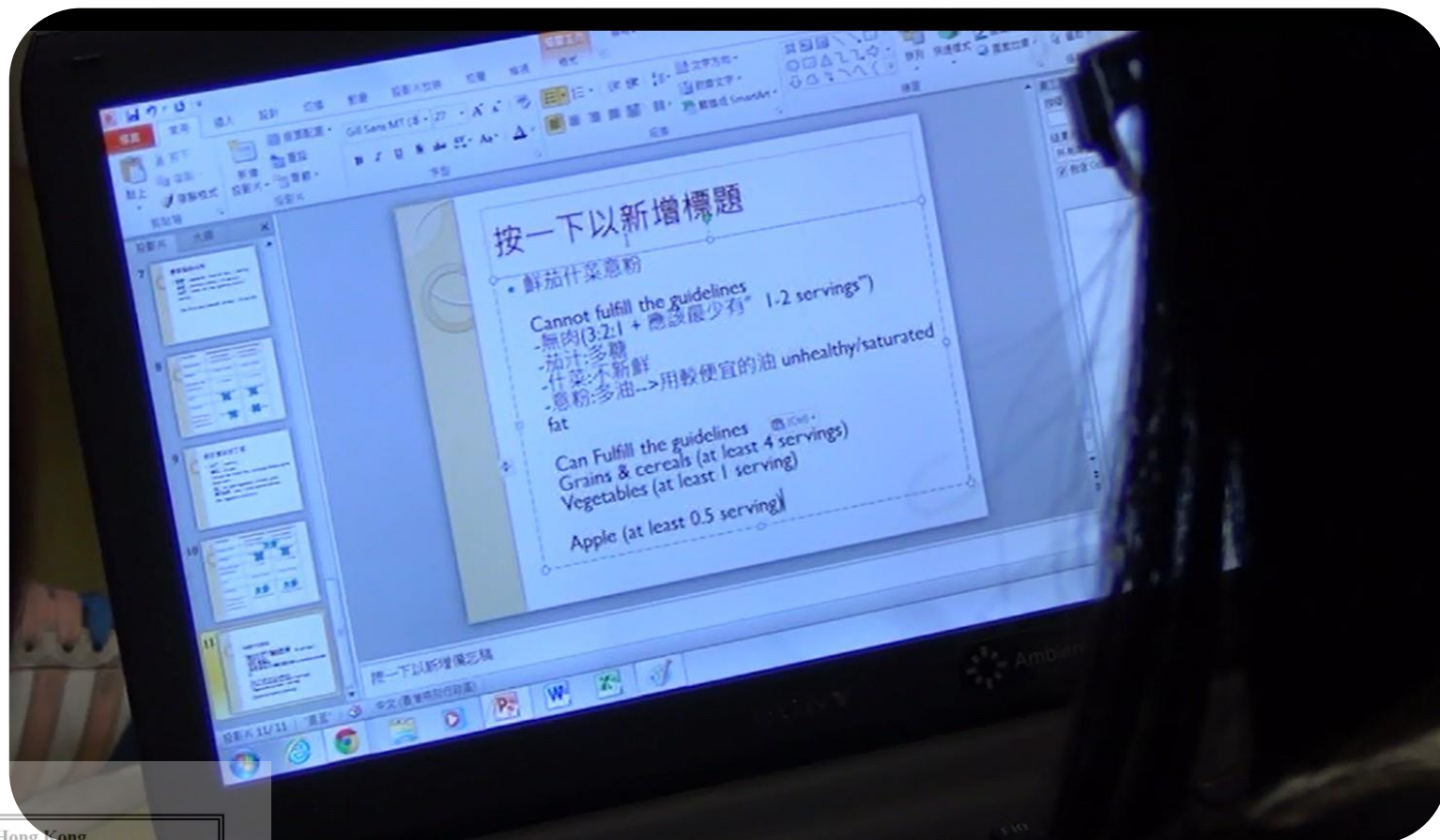
Protein Equivalent for Vegetarian Diet

Each portion should be equivalent to 30 g cooked meat

1 no (large)	Whole egg
2 no (large)	Egg white
1/3 磚	板豆腐
1 磚	水豆腐
1 條	乾支竹 (免炸約 20 厘米長)
6 個	豆泡
15 克	腐竹
1 件	素雞 (免炸約 3.5 X3.5 厘米)
1 件	素火腿 (約 3.5 X3.5 厘米)
1 杯	淡豆漿
1 杯	鮮奶或脫脂奶
4 平湯匙	熟黃豆



CREATE POWERPOINT FOR SHARING



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RECIPES POSTED ON MOODLE FORUM

2013S2_HCS4033_01E02E: x

← → ↻ <https://moodle.iied.edu.hk/mod/forum/index.php?id=15183> ☆ ☰

2013S2 HCS4033 (01E, 02E) INTEGRATIVE NUTRITION Jump to...

HKIEd_Moodle > 2013S2_HCS4033_01E02E > Forums ⓘ Search forums

Subscribe to all forums
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General forums

Forum	Description	Discussions	Subscribed
公傳欄	一般消息與公告	0	Yes

Learning forums

Section	Forum	Description	Discussions	Subscribed
9	Critique on Group A	Critique on Group A	2	Yes
10	Critique on Group B	Critique on Group B	2	No
11	Critique on Group C	Critique on Group C	1	Yes
12	Critique on Group D	Critique on Group D	1	Yes
13	Critique on Group E	Critique on Group E	1	Yes

ⓘ Moodle Docs for this page

You are logged in as CHUNG Ming Yan (Logout)

2013S2_HCS4033_01E02E

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2:13
10/3/2014

2013S2 HCS4033 (01E, 02E) INTEGRATIVE NUTRITION

HKIEd Moodle > 2013S2_HCS4033_01E02E > Forums > Critique on Group A > Group A menu

Display replies in nested form

Jump to ... Search forums

Move this discussion to ... Move

 **Group A menu**
by CHUNG Ming Yan - Wednesday, 5 March 2014, 06:36 PM

 [Group_A.docx](#)

This is the uploaded menu designed by Group A, please give them comments.

[Edit](#) | [Delete](#) | [Reply](#)

Count of ratings: [No rating given](#)


 **Re: Group A menu**
by LEUNG CHI PUI - Wednesday, 5 March 2014, 11:23 PM

nice recipe, but need to beware of the amount of the oil used to fried chicken chest. Blueberries which is an anti-oxidising agent.

Group B

[Show parent](#) | [Edit](#) | [Split](#) | [Delete](#) | [Reply](#)

Count of ratings: [No rating given](#) [Rate...](#)

 **Re: Group A menu**
by CHONG WING SZE - Wednesday, 5 March 2014, 11:50 PM

Thanks for your comment.


But we are not going to "炸" the chicken chest, but we will炒.

Also, as our recipe stated, only 5 grams oil will be used to saute the chicken chest.

Group A

[Show parent](#) | [Edit](#) | [Split](#) | [Delete](#) | [Reply](#)

Count of ratings: [No rating given](#) [Rate...](#)

 **Re: Group A menu**
by CHEUNG TSZ HIM - Thursday, 6 March 2014, 12:19 AM

Dear group A,

I appreciate that you can combine Chinese and Western food. However, I have some questions to raise. Which type of oil will you use? According to the nutritional guideline for students on moodle, oil with saturated fat is strongly discouraged.

Moreover, the amount of vegetables and rice stated in your meal plan does not fulfil the recommended quantity. Is the amount too small?

Hope my comments can help you.

[Show parent](#) | [Edit](#) | [Split](#) | [Delete](#) | [Reply](#)

2013S2_HCS4033_01E02E

← → ↺ <https://moodle.iied.edu.hk/mod/forum/discuss.php?id=37032> ☆ ≡

**Re: Group A menu**
by LEUNG WAI KIT - Thursday, 6 March 2014, 12:10 AM

I think this recipe may taste good and 中西合璧 the suggestion is you mention that the recipe contain vitamin a and how about the taking of other vitamin

Group B

Show parent | Edit | Split | Delete | Reply

Count of ratings: No rating given

**Re: Group A menu**
by KWOK FUNG HING - Thursday, 6 March 2014, 01:07 AM

藍莓是眾多水果中，抗氧化指數高的一種，能防止自由基破壞細胞。而且藍莓含有對眼睛有益的花青素，有增強視力，強化視網膜的效果。

Group B

Show parent | Edit | Split | Delete | Reply

Count of ratings: No rating given

**回應: Group A menu**
by SIN WING ON - Thursday, 6 March 2014, 02:04 PM

這份食譜十分有創意。但我認為60g的飯的份量不足夠供給小學生一餐的所需。應該添加點份量才足夠

By group c Mario

Show parent | Edit | Split | Delete | Reply

Count of ratings: No rating given

**Re: Group A menu**
by CHAN SHUK LING - Thursday, 6 March 2014, 02:07 PM

這份食譜所用的材料豐富，非常吸引，而且纖維素高，但所用的油份略為高了一點。

Group c

Show parent | Edit | Split | Delete | Reply

Count of ratings: No rating given

**Re: Group A menu**
by CHAN SHUK LING - Thursday, 6 March 2014, 02:07 PM

這份食譜所用的材料豐富，非常吸引，而且纖維素高，但所用的油份略為高了一點。

Group c

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W K O G

EN 2:14 10/3/2014

OUTCOME MEASURES

- Learning Survey

- Degree of agreement: 1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree

- Student Focus Group

- Reflective engagement of learners in digital classroom
- 4 students involved in one focus group

Learner Survey

	Question: I think wireless- connected portable computing device...	No. of Valid Responses	Mean (Average)	SD (Stand Deviation)	Disagree & Strongly Disagree (Degree of Agreement: 2 &1) (%)	Neutral (Degree of Agreement: 3) (%)	Strongly Agree & Agree (Degree of Agreement: 5 & 4) (%)
1.	Improves learning motivation in class	41	3.71	0.60	0	15 (36.59)	26 (63.4)
2.	Enhances course- related interaction with lecturers	41	3.68	0.65	1 (2.44)	14 (34.15)	26 (63.42)
3.	Enhances course- related interaction with peers	41	3.80	0.68	1 (2.50)	8 (20.00)	32 (80.00)
4.	Provides instant feedback from lecturers	41	3.44	0.63	2 (4.88)	20 (48.78)	19 (46.34)
5.	Provides instant feedback from peers	41	3.39	0.67	2 (4.88)	23 (56.10)	16 (39.02)
6.	Arouses my attention to the lecture	41	3.78	0.73	1 (2.44)	13 (31.71)	27 (65.85)
7.	Facilitates understanding of the topics by getting access to course-related e- resources.	41	3.56	0.63	1 (2.38)	18 (42.86)	22 (52.38)

	Question: I think wireless- connected portable computing device...	No. of Valid Responses	Mean (Average)	SD (Stand Deviation)	Disagree & Strongly Disagree (Degree of Agreement: 2 &1) (%)	Neutral (Degree of Agreement: 3) (%)	Strongly Agree & Agree (Degree of Agreement: 5 & 4) (%)
8.	Empowers my control over learning	41	3.44	0.67	2 (4.88)	21 (51.22)	18 (43.90)
9.	Stimulates my desire of exploring course- related e-resources	41	3.59	0.77	4 (9.52)	12 (28.57)	25 (59.52)
10.	Enlightens me to have effective study methods and skills	41	3.49	0.78	3 (7.32)	16 (39.02)	22 (53.66)
11.	Fosters collaboration in course work	41	3.66	0.76	2 (4.65)	15 (34.88)	24 (55.81)
12.	Keeps track of my learning progress	41	3.51	0.81	3 (7.50)	16 (40.00)	22 (55.00)
13.	Stores my learning outcomes efficiently	41	3.63	0.83	3 (7.50)	12 (30.00)	26 (65.00)
14.	Fosters self-reflection of learning after class	41	3.41	0.81	3 (7.70)	17 (43.60)	21 (53.85)





LEARNERS' FEEDBACKS

Pros

-students take more initiative to search information and finish assignments.....
-if we heard anything that we did not understand, we could search online with our devices.....
- we opened a Facebook group.....we just divided our work, selected our own dish to design and then shared different parts to Facebook for one of us to combine the work.....Technology speeded up the work distribution.....



- 
- 
-we have are not restricted to course materials and we also get to check nutrition facts online.....
 - teaching and learning was no more “top-down”

Cons

-sometimes wordings can really be easily misunderstood – for example, there is no longer passive voice or active voice, and there is no body language or facial expression.....

SUMMARY

- HCS 4038 Food Safety Education
- Semester 1, 2014/2015
- Learning Outcomes:
 - Searching for smartphone apps for food safety education
 - Features reviews
 - Recommendations

GROUP PRESENTATION ON FOOD SAFETY APPS

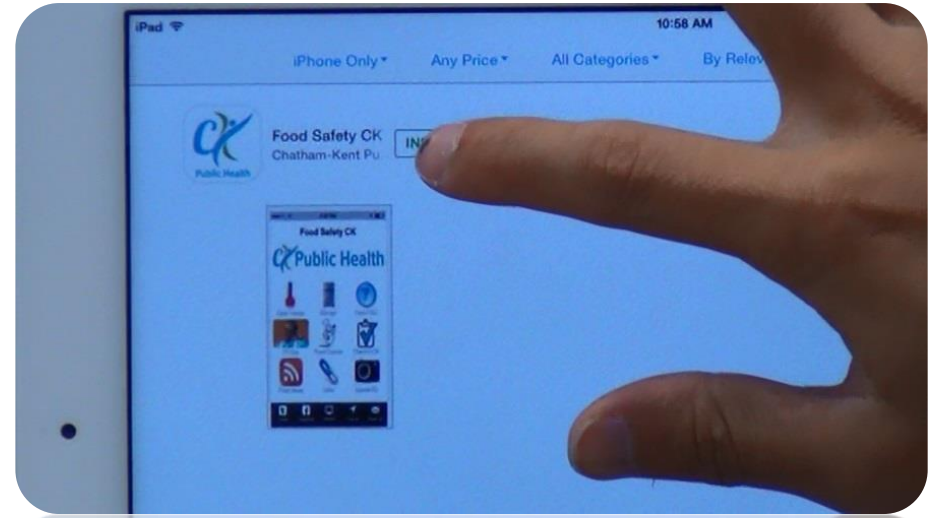
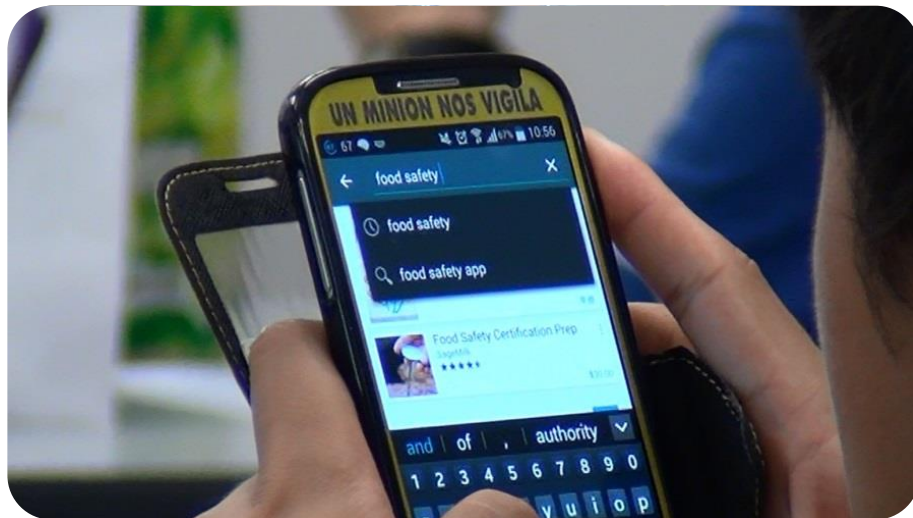


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LIVE DEMONSTRATION WITH BYOD

- Students bring their own devices (BYOD).
- Download the apps in classroom.



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Learner Survey

	Question: I think wireless- connected portable computing device...	No. of Valid Responses	Mean (Average)	SD (Stand Deviation)	Disagree & Strongly Disagree (Degree of Agreement: 2 &1) (%)	Neutral (Degree of Agreement: 3) (%)	Strongly Agree & Agree (Degree of Agreement: 5 & 4) (%)
1.	Improves learning motivation in class	41	3.46	0.81	4 (9.76)	15 (36.59)	22 (53.66)
2.	Enhances course-related interaction with lecturers	41	3.29	0.75	4 (9.76)	21 (51.22)	16 (39.02)
3.	Enhances course-related interaction with peers	41	3.54	0.78	3 (7.32)	14 (34.15)	24 (58.54)
4.	Provides instant feedback from lecturers	41	3.17	0.74	5 (12.20)	24 (58.54)	12 (29.27)
5.	Provides instant feedback from peers	41	3.10	0.77	5 (12.20)	26 (63.41)	10 (24.39)
6.	Arouses my attention to the lecture	41	3.44	0.838	3 (7.32)	17 (41.46)	21 (51.22)
7.	Facilitates understanding of the topics by getting access to course-related e-resources	41	3.66	0.794	2 (4.88)	13 (31.71)	26 (63.42)

	Question: I think wireless- connected portable computing device...	No. of Valid Responses	Mean (Average)	SD (Stand Deviation)	Disagree & Strongly Disagree (Degree of Agreement: 2 &1) (%)	Neutral (Degree of Agreement: 3) (%)	Strongly Agree & Agree (Degree of Agreement: 5 & 4) (%)
8.	Empowers my control over learning	41	3.29	0.75	4 (9.76)	21 (51.22)	16 (39.02)
9.	Stimulates my desire of exploring course- related e-resources	41	3.27	0.71	5 (12.20)	21 (51.22)	15 (36.59)
10.	Enlightens me to have effective study methods and skills	41	3.22	0.88	7 (17.07)	17 (41.46)	17 (41.46)
11.	Fosters collaboration in course work	41	3.29	0.78	5 (12.20)	19 (46.34)	17 (41.46)
12.	Keeps track of my learning progress	41	3.27	0.95	7 (17.07)	14 (34.15)	20 (48.78)
13.	Stores my learning outcomes efficiently	41	3.51	0.87	5 (12.20)	12 (29.27)	24 (58.54)
14.	Fosters self-reflection of learning after class	41	3.20	0.71	4 (9.76)	25 (60.98)	12 (29.27)



LEARNERS' FEEDBACK

How do you feel BYOD changes learning in digital classrooms?

- ...the lecture provides the basics we need to know, when we discuss, we need to check online and search for more information, BYOD is useful.
- How do BYOD influence learning outside digital classrooms?
- On my way home, I use my smartphone to search some information and prepare assignments....
- Being a learner, do you think BYOD changes the role of a teacher?
- ...in tertiary education, learners cannot just rely on materials provided by the teacher, we need to learn on our own and mobile devices provides much convenience.....but the teacher still lead the class and BYOD is just to facilitate her teaching and our learning.....

- In what aspects do you agree that BYOD can engage learners in reflective learning activities?
 -personal engagement is increased...
 - division on work among group members is efficient and each member can contribute to the group work.....
- What concern you from the use of BYOD in learning?
 -if it is compulsory.....
- Compared with conventional learning activities, do you agree the use of BYOD can create a better learning environment?
 - Agree

Thanks!



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