INTRODUCTION
Peanuts have been reported as one of major aflatoxin contaminated products in almost all countries. Its presence is serious public health concern worldwide, particularly in developing countries. Aflatoxin has been classified into AFB1, AFB2, AFG1, and AFG2 based on fluorescent and chemistry structure. AFB1 known as class 1A human carcinogen (IARC, 1993). AFB1 was reported to increase the risk of Hepatocellular Carcinoma (HCC) when associated with hepatitis B or C (Kirk et al. 2005, Wu et al. 2013). It was contributed 4.6%-28.2% of total annual HCC cases (Zhao et al. 2013).

The conversion of AFB1 to a reactive metabolite (aflatoxin-8,9-epoxide) by cytochrome P450 can produced DNA adduct that lead to p53 tumor suppressor gene mutation in the liver. These increase the risk of Hepatocelular Carcinoma (HCC) when associated with hepatitis B or C (Kirk et al. 2005, Wu et al. 2013). It was contributed 4.6%-28.2% of total annual HCC cases (Zhao et al. 2013).

WHO recommends an integrated control of aflatoxin in the human diet. Currently, Indonesian and Thailand authorities has a maximum tolerable level of 20 μg·kg⁻¹ for total aflatoxin in food products. Raw peanut and its products are frequently contaminated with aflatoxins. It has to be considered as high risk agricultural commodity. However, peanut products are staple in Indonesian and Thai population. They consume either unprocessed or processed peanuts. The most popular peanut product is peanut sauce mixed with chili. It serves with variety of dishes. In Indonesia it serves with pecel, gado-gado, ketoprak and satay. In Thailand it served with thai pork satay: moo ping. Limited study performed the contamination all types of aflatoxin from peanuts and its product especially peanut sauce.

OBJECTIVES
- To investigate the occurrence of aflatoxins from raw peanut and its product consumed by Indonesian and Thai population.
- To estimate cancer risk of aflatoxin dietary exposure from raw peanut and its products.

METHODS

1) Sampling
A total of 99 peanuts (67 samples from Indonesia and 32 samples from Thailand) were collected between April and July 2014.

2) Sample extraction
Aflatoxins level in raw peanuts and its product considered in this study. It is described as the mean daily intake (PDIm).

3) Aflatoxin (B1, B2, G1, and G2) analysis
Analysis of aflatoxin in peanut samples was performed by LC-MS/MS system (Agilent 1100 series equipped with Micromass® Quattro micro™ MS/MS detector).

RESULTS AND DISCUSSION
1. Level of aflatoxin contaminations
- Aflatoxin level in raw peanuts and its product from both Indonesia and Thailand has same trend.
- Among three samples, peanut sauce tested has the highest aflatoxin levels compared to the raw peanuts and cooked peanuts. The most popular peanut product is peanut sauce mixed with chili. It serves with variety of dishes. In Indonesia it serves with pecel, gado-gado, ketoprak and sate. In Thailand it served with thai pork satay: moo ping. Limited study performed the contamination all types of aflatoxin from peanuts and its product especially peanut sauce.
- It has to be considered as high risk agricultural commodity. However, peanut products are staple in Indonesian and Thai population. They consume either unprocessed or processed peanuts. The most popular peanut product is peanut sauce mixed with chili. It serves with variety of dishes. In Indonesia it serves with pecel, gado-gado, ketoprak and satay. In Thailand it served with thai pork satay: moo ping. Limited study performed the contamination all types of aflatoxin from peanuts and its product especially peanut sauce.

2. Probable mean daily intake (PDIm) and cancer risk estimation
- Indonesia and Thailand has higher PDIm when compared to the country that has lower incidence of total aflatoxins such as European Union (0.47 ng kg b.w. d⁻¹) and US (0.26 ng kg b.w. d⁻¹) (WHO,1999).
- Based on the mean dietary exposure level to AFB1, cancer risk was estimated at 0.039 cancer cases/100,000 persons/year for . These cancer cases are estimated to be lower than China (0.042 cancer cases/100,000 persons/year) (Zhao et al. 2013).

CONCLUSION
Peanut sauce products has the highest aflatoxin levels compared to the raw peanuts and cooked peanuts. Its could established more than two fold higher than the raw peanuts due to processing stages. Aflatoxin levels in group samples found in both Indonesia and Thailand has same trend. Indonesia and Thailand has higher probable mean daily intake of aflatoxins when compared to other countries that has lower incidence. It will affects in liver cancer risk in both population for long term exposure. A broad study on a number of peanut samples and other food products from this area should be carried out to provide additional information and to confirm the health risk.

ACKNOWLEDGMENTS
Thanks to the Center for Environmental Health, Toxicology, and Management of Chemical under Science and Technology Postgraduate Education and Research Development Officer (PERDO) and Chulabhorn Graduate Institute (CGI) for their financial support of this work.

REFERENCES
4. IARC :International Agency for Research on Cancer (1993); IARC Monograph Eval. Carc. 82:171-300
5. Eaton DL, Gallagher EP. (1994); Annu. Rev. ... Toxicol. 34:135-172
11. WHO: World Health Organization (1999); WHO food additive series.