

An Analysis of Salbutamol in Pork

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Abstract-This project aims to design and Inspection machine test in red meat , pork. Components designed in This project consisted of two parts. In the first is a series circuit Sensor Switch RT-2 for use as sensors detect objects through time. And the second coil heat for heating the meat to check. The results showed that checking the test salbutamol Rapid Test and machine test in red meat, pork. From sample collection market neighborhood in Rat Barona district and Thung Khru District ten of the market detected salbutamol at one place from testing with Inspection machine test In red meat, pork accurate compatible with salbutamol Rapid Test and can be used in real time to verification catalyst red meat in the lab. The developed method was successfully applied to determine salbutamol content in pork samples with satisfactory results.

Keyword : Salbutamol, Sensor Switch RT-2, Heating coils

I. INTRODUCTION

Advances in technology, resulting in the business of agricultural and industrial progress productivity are the answer to the needs of consumers in different ways. Making meat and meat products are being developed to improve the quality needs always. One good side effect, it can meet the need for intermediaries and consumers.

But the other hand showed the potential dangers that come with meat consumption. This may be done accidentally or innocently from the manufacturers and suppliers that pose danger or cause to consumers in the long term. The study, which is the raw material most commonly used for cooking in Thailand. It is a major source of protein currently, the average consumption of pork 12.3 kg / person / year the area of consumption that we could have used America Blue Hill Times (Salbutamol), a substance agonist, the beta agonist (B-agonists).

In Thailand, the catalyst for red meat in livestock, particularly swine farmers used to grow animal meat is very good for a high price. Consumers like it because it has less red meat. Although the government has taken several measures to prevent farmers use chemicals of red meat. But it also found that the use of illegal substances in speeding up red meat, pork. Livestock Department has considered the revised regulations. Feed Quality Control Act up to date on the Animal Control

Act No. 2 of 1999 on 25 March 1999 onwards. The authority covers all manufacturers; importers sell animal feed, as well as farm animals. If the violation is an offense under the Animal Control Act 1982, Section 6 (5), 57 (4) (a), and if I residues in meat is considered a breach of Health Ministry announced corn (No. 269) BE 2546 standard food contaminated with the chemical group's beta agonist.

The problem of contamination agonist in pork sold in the markets has been found in Bangkok and in the provinces Found contamination in red meat, pork catalyst to 8.536% causes a risk of harm to the health of consumers. If you shop at the market leading pork is contaminated agonist dealers and consumers lack knowledge of your pork properly, so the organizers do have an interest to study and dress AMC Monitors catalyst pork meat in order to determine the substance used as an agonist at the risk of contaminated meat. At present, there is no test kit manufacturer catalyst residues in pork meat must come from abroad to test catalyst red meat prices are quite high, but the Department of Medical Sciences has produced. In the first period, but the price is relatively high at present, discontinued it.

Organizers do not realize the dangers of speeding, red meat, so I want to study and test for substances agonist in pork manually by a tester for a catalyst red meat in pork to Sq. the pork in the market and Rat Burin, Thug Khru. 10 held together by the researchers to test ways to cut two sets of test compounds Salman Abu-time monitoring of cholesterol and a catalyst in pork meat.

In order to harness the advantage of any market that we can get to eat pork is safe and can be used as a monitoring tool catalyst meat to the agency that is relevant.

II. EXPERIMENTAL SETUP

Design Monitors catalyst in pork meat. The introduction of the principle components of the assembly as well as a fundamental mechanism in the design and monitoring chemicals in beef, pork researchers use sensors to detect swine. To order the inspection work. From design through calculations mentioned initially form.

- RT-2 sensor switches can power 220 V controls the operation of the monitoring catalyst pork.

- The temperature inside the box is a digital display.
- Remove the multi-purpose drill holes. To install a stent put in a box.
- Bring the pan to the fire that can withstand heat. Be installed in the middle of the ground.
- Sensor Switch RT-2 led to a 220V supply for the circuit.
- Dimmer Switch electronic machines and switch off the turn. Attributed to the switch box and bring it to light.

Test Monitors catalyst pork. The information is used to edit and compare with the test substance Salbutamol Monitors catalyst pork. To find out the mistakes from design make modifications, show in Fig. 1.



Fig. 1. Salbutamol in pork test.

III. EXPERIMENTAL RESULTS

The analysis of Salbutamol in pork test was prepared for investigation pork meat. It consists of Sensor Switch RT-2, Dimmer Switch electronic (FJ1155), heat coil, Digital Thermeter (TM2), and switch on-off, show in Fig. 2.



Fig. 2. Purposed Salbutamol in pork test

The simple of salbutamol in pork test made from market around King Mongkut's University of Technology Thonburi (KMUTT), Bangkok, Thailand such as Bangpagok center market, New Thung-Kru 61 market, Thip Plaza market, Yingreaw Market, Navy market, Kwanjai market, Watput market, Mea Somsri market, Ratburana market and Suksawat market, show in Table 1.

TABLE 1. COMPARISON OF SALBUTAMOL IN PORK TEST IN BOTH METHOD

Markets	Substance test		Purposed test	
	Found	Not Found	Found	Not Found
Bangpagok center market		✓		✓
New Thung-Kru 61 market		✓		✓
Thip Plaza market		✓		✓
Navy market		✓		✓
Kwanjai market		✓		✓
Watput market		✓		✓
Mea Somsri market		✓		✓
Ratburana market	✓		✓	
Suksawat market		✓		✓

Table 1 show comparison of the test substance Salbutamol monitors catalyst pork and purposed test. The Ratburana market was found salbutamol in pork, and all markets was not found salbutamol in pork. These experimental results were error of salbutamol in pork about 1%.

IV. CONCLUSIONS

This project has conducted studies examining chemicals in red meat, pork products by the second method is to test the substance salbutamol monitoring with ethanol catalyst in pork meat. The tested samples from the market and Rat Burana, Thung Khru total of 10 markets with chemicals found in red meat, just one of the pigs comprehensive enough content on learning objectives defined. Results for the composite image of each check sulfur compounds salbutamol. The experiment with test compounds salbutamol. The market of Rat Burana, Thung Khru, and the number of detected 10 chemicals 10% of the red meat market, all sampled pork. The results of the comparison are monitoring chemicals in pork meat. Test kit to test the substance agonist is same. Agonist compounds were detected 10% of the total market for pork samples. Shows that the Monitors catalyst in pork meat with precision and can be used practically. Residue datas of beta-agonist analysis in raw pork tissues were collected from food safety project surveillance. Since mostly, we do not eat raw meat, but cooked meat. Therefore, the effect of heating on salbutamol residue (beta-agonist) was studied, both of boiling and roasting. Before analysis, the method efficiency should be verified for accuracy and precision. The investigation indicated that cooking could not totally break down salbutamol residue. The data obtained from this study are useful to estimate exposure of salbutamol to consumer.

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