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STUDIES ON USING OF DATE SYRUP (DIBIS) IN YOGHURT MAKING

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ABSTRACT

Date syrup (Dibis) was prepared from Siwi date variety and sterilized by Tindilization. Date syrup-yoghurt was prepared by adding varying concentrations of Dibis (1, 3, 5 and 7%) to milk and inoculated with 2% active growing culture and stored at $4 \pm 2^{\circ}\text{C}$ up to 9 days. The results showed that, date syrup was high of total solids and acidity; and rich in Ca, K, P, Mg and Fe. Total solids, acidity, density, firmness, syneresis, K, P, Mg and Fe of plain and Date syrup-yoghurt increased with increasing Dibis concentration and storage period up to 9 days in all treatments. Fat content decreased with increasing of Dibis concentration and storage period up to 9 days in all treatments. The SN and TN in all treatments increased and decreased with increasing the storage period up to 9 days, respectively. The values of TN in Date syrup-yoghurt decreased with increasing of Dibis concentration. It is clear that, as the storage period proceeded, the SN/TN of all treatments gradually increased at control and all treatments. In addition, the Date syrup-yoghurt had higher scores of flavour than that of plain yoghurt at any concentrations of Dibis in fresh and after storage up to 9 days. The Date syrup-yoghurt with high concentration of Dibis (7%) had lower values of flavour, body & texture, appearance & colour and overall scores than that in other samples with concentration of Dibis. Whilst, the samples with 3% Dibis stored for 3 days had superior scores of overall scores, followed by 5% Dibis without storage.

INTRODUCTION

The Date palm (*Phoenix dactylifera L.*) is one of the major fruit trees in Egypt (El-Assar *et al.*, ٢٠٠٥). Its production and consumption is growing continuously due to its therapeutic properties beside its high nutritive value (Karagul *et al.*, ٢٠٠٤). Date fruit is an important source of supplying minerals and vitamin elements with acceptable taste. It is well known that, fresh fermented dairy products such as yoghurt are widely consumed foods in many countries. Yoghurt is one of the most dairy products sold on the market because of the diversification of the range available: reduced fat yoghurt, probiotic yoghurt, yoghurt mousse, frozen yoghurt, liquid yoghurt for drinking (Fizman *et al.*, ١٩٩٩). It is an important dairy product, particularly for consumers with lactose intolerance; and considered a healthy food because it contains viable bacteria that are considered probiotics. Milk and dairy products do not contain fiber. Fiber is found in the cell wall of fruits, vegetables and cereals (Lunn and Buttriss, ٢٠٠٧). The addition of dietary fiber to yoghurt would complement its healthy characteristics (Hashim *et al.*, ٢٠٠٩). Yoghurt enriched with ١٠% Dibis had a significant sweetness, recorded the highest antioxidant values, and was higher in HCl-soluble minerals and folate concentration compared to plain yoghurt. The numerous health benefits beyond its nutritional value have been associated with consuming yoghurt enriched with ١٠% Dibis (Gad *et al.*, ٢٠١٠). Dibis is probably the most common derived date product. It is produced as an incidental by-product when bagged humid dates are heaped for several months. Also, it is produced in the home and village by extraction and boiling down of juice and on a semi and full industrial scale (FAO, ٢٠٠٤).

The present study was designed to assess the use of Dibis from Siwi varieties as ingredient in enhancing the quality characteristics of yoghurt.

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MATERIALS AND METHODS

Materials:

Fresh buffalo's milk was obtained from the herd of the animal production department, faculty of Agriculture, Al-Azhar University (Assiut Branch).

Yoghurt starter consisted of *Lactobacillus delbueckii* subsp *bulgaricus* (EMCC 11102) and *Streptococcus thermophilus* (EMCC 11044) was obtained from Cairo Microbiological Resource Center (MIRCEN), Faculty of Agriculture, Ain Shams University.

Siwi dates variety was obtained from locale market, Egypt.

Methods:

Preparation of date syrup (Dibis):

The pulp of Siwi date was separated from kernel, then the pulp was weighted and washed twice. The washed pulp was extracted using water 1-2 rate at 40°C for two hours with stirring at intervals. Mixture is placed in molds and then pressing. The juice was filtered in cheese clothes (double layer). Juice was concentrated using water bath at 40°C until total soluble solids reaches 42% to avoid spoilage the date syrup when storage. Date syrup was sterilized by Tindilization and storage at room temperature until use it.

Manufacture of Date syrup-yoghurt:

Full cream Buffalo milk (6% fat) was divided into five equal portions; every part was heated to 90±1°C for 10 min, rapidly cooled to 45-48°C, and then addition the date syrup as following:

C- Leaves as control.

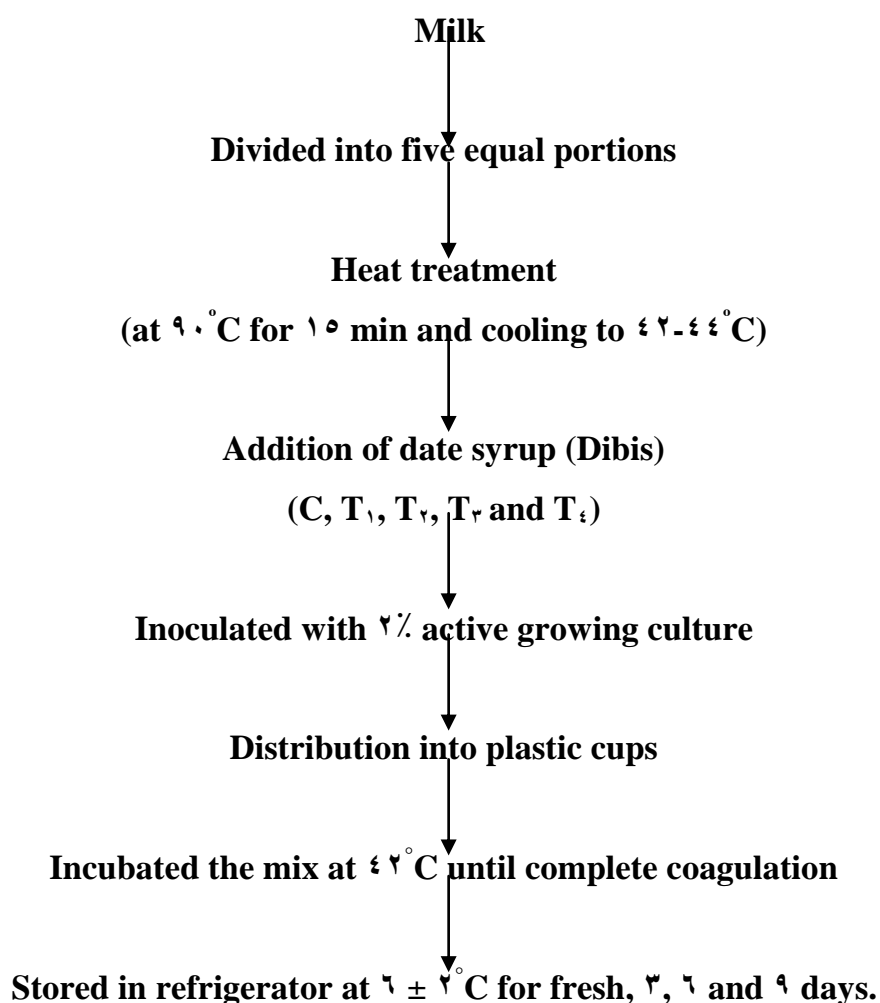
T₁: Adding 1% (w/w) date syrup.

T₂: Adding 3% (w/w) date syrup.

T₃: Adding 6% (w/w) date syrup.

T₄: Adding 9% (w/w) date syrup.

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Each part was inoculated with 2% active growing culture [mixed 1:1 *Lactobacillus delbrueckii* subsp *bulgaricus* (EMCC 11102) and *Streptococcus thermophilus* (EMCC 11044)], according to Tawfik *et al.* (2003). Inoculated milk of each portion was equally distributed into plastic cups (100 ml), incubated the mixture at 42°C until complete coagulation. After coagulation, samples were kept in the refrigerator at 4 ± 2°C. The samples were tested when fresh and after 3, 6 and 9 days of storage.

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Chemical Analysis:

Total solids, Fat content, Titratable acidity, Total nitrogen and soluble nitrogen: were determined according to Ling (1963).

pH measurement: The pH of the samples was determined using a pH meter (model 7A ESD 19713), USA.

Calcium and magnesium contents: were estimated according to the method of Ntalianas and Whitney (1964).

Phosphorus content: was determined according to Tiessen and Moir (1993).

Potassium content: was estimated by Flame photometer.

Determination of Iron: Atomic Absorption Spectrophotometric was used for the determination of Iron.

Carbohydrates content: was determined according to Dubois et al. (1956).

Rheological properties:

Curd firmness: The penetration method described by Shalabi (1987) was used.

Curd syneresis: One hundred grams of Date syrup-yoghurt sample was placed on a filter paper resting on a top of a funnel. After 2 hours of drainage at 4°C, the quantity of whey collected in a 20 ml graduated cylinder was used as an index of syneresis (Farooq and Haque, 1992).

Density: Density was calculated using the regular equation as follows:

$$\text{Density (gm/cm}^3\text{)} =$$

The measurements of all previous tests were done in triplicate.

Sensory evaluation:

The organoleptic evaluation of resultant yoghurt and Date syrup-yoghurt was assessed by a panel of 10 persons of staff members of the Dairy Department, Faculty of Agriculture, Al-Azhar University (Assiut Branch), fresh and after 3, 6 and 9 days of storage at $7 \pm 2^{\circ}\text{C}$ according to the scheme described by Pearce and Heap (1974).

RESULTS AND DISCUSSION

In this present investigation attempts have been made to judge the suitability of varying the levels of date syrup obtained from Siwi variety for yoghurt. Date syrup-yoghurt is made by combining different levels of Dibis (1, 3, 6 and 9%) before fermentation and stored at refrigerator up to 9 days. The product obtained, was evaluated for its chemical composition, rheological properties and sensory evaluation.

The physico-chemical composition of Siwi date syrup (Dibis):

Data presented in Table 1 illustrate the physico-chemical composition of Siwi date syrup. The data revealed that, total soluble solid (TSS) of the date syrup was high. This is principle due to the high level of sugars and relatively low moisture content. While, it was low of fat and total nitrogen.

Table 1: Physico-chemical composition of Siwi date syrup (Dibis).

Component		Ratio
Moisture (%)		27.96
Total soluble solids (%)		72.00
Carbohydrates (%)		69.39
Fat (%)		1.77
Total nitrogen (%)		0.124
Acidity (%)		0.29
pH		4.20
Density gm/cm ³		1.630
Minerals (on wet basis) (mg/100 gm)	Calcium (Ca)	163
	Potassium (K)	291
	Phosphors (P)	176
	Magnesium (Mg)	136
	Iron (Fe)	4.5

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The acidity percent was 0.29%, while the pH value was 4.20 for date's syrup. The high level of acidity in the date's syrup contributed to its stability against microorganisms. The results confirm those recorded by Mikki *et al.* (1983) and Mohamed and Ahmed (1981) for Libyan dates syrup. The optical density of date's syrup was 1.33 gm/cm². The above data showed that, the prepared date's syrup had high acidity and total solids contents, therefore the expected storage ability will be high. On the other hand, the date's syrup is rich in calcium, potassium, phosphorus, magnesium and iron. The present data are in the same line with those reported by Mikki *et al.* (1983) and Mustafa *et al.* (1983) and higher than those published by Mohamed & Ahmed (1981) and Al-Saidy *et al.* (1982). The results of Khalil *et al.* (2002) indicated that, Dabis is a good source of amino acids and many important elements such as; K, Na, Ca, Mg, Fe and Zn.

The chemical composition of plain yoghurt and Date syrup-yoghurt:

Data presented in Table 5 illustrate the chemical composition of plain yoghurt and Date syrup-yoghurt with the varying of Dabis concentrations during storage periods at refrigerator up to 9 days.

Total solid contents:

The data revealed that, the total solids content of plain yoghurt and Date syrup-yoghurt was affected by addition of Dabis and during storage periods. The total solids content of yoghurt and Date syrup-yoghurt found to increase with increasing the storage period up to 9 days in all treatments. On the other hand, the total solids content of Date syrup-yoghurt found to increase with increasing of Dabis concentration. These results are similar to the results obtained by Hashim (2004) and Hashmi *et al.* (2011).

Table ٢: Effect of varying Dibis concentration on chemical composition of yoghurt and Date syrup-yoghurt during storage period at refrigerator up to ٩ days.

Component	Storage (days)	Control	Percentage of Dibis (%)			
			١	٣	٥	٧
TS (%)	Fresh	١٥.٥٦	١٦.٠٣	١٦.١٠	١٦.٥٤	١٦.٧٣
	٣	١٥.٦٥	١٦.٢٩	١٦.٦٦	١٧.٠٤	١٧.١٤
	٦	١٥.٧٤	١٦.٥٧	١٧.١٨	١٧.٤٨	١٧.٧٢
	٩	١٦.٠١	١٦.٧٦	١٧.٥٥	١٧.٨٥	١٨.٠٩
Fat (%)	Fresh	٦.١٣	٥.٩٧	٥.٨٩	٥.٧٨	٥.٦٩
	٣	٦.٠٠	٥.٨٧	٥.٨٣	٥.٦٩	٥.٦٢
	٦	٥.٩٥	٥.٧٧	٥.٧٣	٥.٦٠	٥.٥٧
	٩	٥.٩٠	٥.٦٧	٥.٦٥	٥.٥٦	٥.٥١
Acidity (%)	Fresh	٠.٥٧	٠.٦٩	٠.٨١	٠.٨١	٠.٨١
	٣	٠.٦٣	٠.٧٥	٠.٨٣	٠.٨٨	٠.٩٣
	٦	٠.٦٧	٠.٧٦	٠.٨٤	٠.٩٩	٠.٩٨
	٩	٠.٧٥	٠.٧٨	٠.٩٥	١.٠٨	١.١٠
pH	Fresh	٥.١٩	٤.٨٨	٤.٧٦	٤.٦٤	٤.٤٦
	٣	٥.١٥	٤.٨٦	٤.٦٩	٤.٥٨	٤.٤٤
	٦	٥.٠٧	٤.٨٥	٤.٥٨	٤.٣٩	٤.٣٩
	٩	٤.٩٣	٤.٧٥	٤.٤٩	٤.٢٧	٤.٢٣
SN (%)	Fresh	٠.٠٥٥	٠.٠٥٣	٠.٠٥٤	٠.٠٥١	٠.٠٥٥
	٣	٠.٠٦٣	٠.٠٦٥	٠.٠٥٧	٠.٠٥٢	٠.٠٥٩
	٦	٠.٠٦٨	٠.٠٦٥	٠.٠٦١	٠.٠٦٢	٠.٠٦٣
	٩	٠.٠٦٩	٠.٠٧١	٠.٠٦٣	٠.٠٦٨	٠.٠٦٥
TN (%)	Fresh	٠.٩٣١	٠.٨٨٧	٠.٨٨٤	٠.٨٦٠	٠.٨٥٣
	٣	٠.٨٤٩	٠.٨٢٤	٠.٨٠٢	٠.٨٠١	٠.٧٨٩
	٦	٠.٧٨٣	٠.٧٦٤	٠.٧٥٤	٠.٧٥٢	٠.٧٣٣
	٩	٠.٧١٦	٠.٧١٥	٠.٦٨٥	٠.٦٨١	٠.٦٦١
(SN/TN) X ١٠٠	Fresh	٥.٩١	٥.٩٨	٦.١١	٥.٩٣	٦.٤٥
	٣	٧.٤٢	٧.٨٩	٧.١١	٦.٤٩	٧.٤٨
	٦	٨.٦٨	٨.٥١	٨.١٩	٨.٣٦	٨.٥٩
	٩	٩.٦٤	٩.٩٣	٩.٢٠	٩.٩٩	٩.٨٣

Fat contents:

The data revealed that, fat content of yoghurt and Date syrup-yoghurt was found to decrease with increasing the storage period at refrigerator up to ٩ days. The fat content of Date syrup-yoghurt was

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found to decrease with increasing Dabis concentration. This may be due to low fat content in Dabis.

Acidity and pH values:

Acidity of yoghurt and Date syrup-yoghurt was affected by addition of Dabis and during storage periods. The acidity of yoghurt and Date syrup-yoghurt was found to increase with increasing of Dabis concentration and during storage period at refrigerator up to 9 days. O'Neil *et al.* (1979) and Hashmi *et al.* (2011) observed an increase in acidity with increasing the concentration of date palm past. While, the pH values of yoghurt and Date syrup-yoghurt was found to decrease with increasing of Dabis concentration and during storage period up to 9 days. This may be due to the more carbohydrate content of Dabis being converted into acid in fermentation process. O'Neil *et al.* (1979); Zekai & Erdogan (2003) and Hashmi *et al.* (2011) reported that acidity and pH values of yoghurt in the similar range. When pH decreased alcoholic aroma and acidic taste increased in yoghurt samples as a result flavour scores were decreased.

Soluble and total nitrogen:

The data revealed that, soluble and total nitrogen of yoghurt and Date syrup-yoghurt was affected by addition of Dabis during storage periods. The soluble nitrogen of yoghurt and Date syrup-yoghurt increased with increasing the storage period at refrigerator up to 9 days in all treatments. While, total nitrogen values of yoghurt and Date syrup-yoghurt decreased with increasing the storage period up to 9 days in all treatments. On the other hand, the values of Date syrup-yoghurt decreased with increasing Dabis concentration. In addition, it is clear from these data that as the storage period progressed, the SN/TN of all treatments gradually increased in control and all treatments.

Total contents of major minerals:

Data presented in Table 3 illustrate the major minerals of plain yoghurt and Date syrup-yoghurt with various Dabis concentration during storage at refrigerator up to 9 days. The obtained data observed that, the calcium, potassium, phosphors, magnesium and iron of

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yoghurt and Date syrup-yoghurt increased with increasing of the storage period to 9 days in all treatments.

Table 3: Effect of varying Dibs concentration on minerals (mg/100 gm) of yoghurt and *Date syrup-yoghurt* during fresh and after storage periods at 9 days (on

Treatment	Ca		K		P		Mg		Fe	
	Fresh	9 day	Fresh	9 day	fresh	9 day	fresh	9 day	fresh	9 day
Control	183.19	188.16	179.03	189.03	169.27	172.01	13.03	13.89	0.91	0.96

wet basis).

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1% Dibis	182.08	187.15	177.9 1	187.9 1	169.40	172.88	14.24	14.06	0.00	0.61
2% Dibis	181.00	186.57	183.0 8	193.7 2	169.83	172.98	10.78	10.99	0.63	0.69
5% Dibis	179.52	184.16	187.90	197.67	170.22	173.24	18.09	18.20	0.67	0.72
7% Dibis	178.06	183.99	193.00	203.48	170.40	173.56	19.87	20.10	0.76	0.80

On the other hand, the values of potassium, phosphorus, magnesium and iron of yoghurt and Date syrup-yoghurt increased with increasing of Dibis concentration. While, the values of calcium decreased with increasing Dibis concentration. Pennington and Young (1990) found that, the amount of iron in the plain yoghurt is 0.5 mg/kg.

Rheological properties:

Data presented in Table 4 shows the mean values of some rheological properties of yoghurt and Date syrup-yoghurt (consistency, syneresis and density) with varying the concentrations of Dibis (1, 3, 5 and 7%) during storage periods at refrigerator up to 9 days.

The obtained data observed that, the consistency of Date syrup-yoghurt was found to increase with increasing of Dibis concentration and with increasing the storage period at refrigerator up to 9 days in all treatments. On the other hand, the data showed that, the control samples had the lowest values than the other treatments using Dibis.

Table 4: Rheological properties of yoghurt and Date syrup-yoghurt during fresh and after storage periods at refrigerator up to 9 days (Firmness, Syneresis and density).

Properties	Storage (days)	Control	Percentage of Dibis (%)			
			1	3	5	7
Firmness (gm)	Fresh	10.66	12.44	12.61	12.75	13.11
	3	12.09	14.75	15.10	16.50	17.35
	6	13.68	15.60	18.50	19.82	21.87
	9	17.77	18.62	20.01	20.81	24.67
Syneresis (ml/100 gm)	Fresh	33	38	39	39	39
	3	39	40	41	43	43
	6	41	42	43	44	44
	9	42	44	45	45	45
Density (gm/cm ³)	Fresh	1.23	1.24	1.25	1.25	1.26
	3	1.24	1.25	1.25	1.26	1.27
	6	1.25	1.27	1.27	1.27	1.29
	9	1.27	1.30	1.31	1.31	1.32

In addition, there was an increase of syneresis of samples during storage periods till 9 days of storage in all treatments. Similar trend was found by Farooq and Haque (1992). Syneresis of the Date syrup-yoghurt samples ranged from 38 to 45%. A similar result was found by Katsiari *et al.* (2002). The higher values of syneresis might be due to acid development and increased shrinkage in yoghurt throughout the

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storage. Also, the data observed no differences between yoghurt containing 0 and 4% of Dibis .

Regarding density, the data observed that, the density of yoghurt and Date syrup-yoghurt was found to increase with increasing of Dibis concentration. This may be due to the increased of total solids in Dibis. Also, the density increase with increasing the storage period up to 9 days in all treatments.

Organoleptic properties:

Data presented in Table 6 illustrate the organoleptic properties of plain yoghurt and Date syrup-yoghurt with the varying of Dibis concentrations during storage periods at refrigerator up to 9 days. The data revealed that, the organoleptic properties such as; flavor, body and texture and appearance and colour of plain yoghurt and Date syrup-yoghurt were affected by addition of Dibis and during storage periods. Mean values of the organoleptic scores within each treatment, examined by panel test and score were awarded for flavour (60), body & texture (30) and appearance & colour (20 points) according to Pearce and Heap (1974).

Table 6: Sensory quality of yoghurt and *Date syrup-yoghurt* during fresh and after storage periods up to 9 days.

Properties	Storage (days)	Control	Percentage of Dibis (%)			
			1	3	0	4
Flavor (60)	Fresh	34.00	36.11	38.00	39.88	38.88
	3	30.70	38.70	40.70	39.70	37.00
	6	33.80	37.28	38.14	39.42	37.00
	9	43.37	39.40	41.27	37.09	37.18
Body & Texture (30)	Fresh	20.77	20.77	24.00	20.00	23.77
	3	23.70	24.70	27.20	20.00	24.00
	6	21.28	22.14	24.00	20.00	22.00
	9	21.81	23.91	20.90	23.72	24.81
Appearance & Colour (20)	Fresh	18.44	17.77	17.11	17.11	14.77
	3	17.70	17.70	17.20	17.70	10.00
	6	17.71	17.28	17.00	17.14	10.00
	9	17.37	17.09	17.74	10.37	10.91
Overall Score (100)	Fresh	78.70	79.04	79.21	82.04	77.20
	3	77.20	81.20	80.20	82.00	77.00
	6	72.84	70.70	78.14	80.07	74.00
	9	82.03	80.40	84.81	70.17	77.90

Flavour:

Flavour of Date syrup-yoghurt was influenced by Dibis incorporation. The obtained data observed that, Date syrup-yoghurt had higher scores than plain yoghurt at any concentrations of Dibis in fresh and after storage up to 7 days. While, the sample with 4% Dibis had less scores than that in other concentrations of Dibis. This may be due to further increase in concentration resulted in increasing the alcoholic aroma and acidic taste of yoghurt. On the other hand, plain yoghurt and Date syrup-yoghurt with 3% Dibis was superior at storage on 9 days among all the other samples.

Body and texture:

The data revealed that, score of Date syrup-yoghurt was good in body and texture compared to control sample at all treatments except fresh samples. On the other hand, sample with high concentration of Dibis (4%) had lower values than that in other samples with concentration of Dibis. The higher level of Dibis concentration reduced the score for body and texture. This may be due to separation of whey at high level of Dibis and production of acids, to give the reduced coagulation and formation of soft and loose textured curd.

Appearance and colour:

The data revealed that, score of Date syrup-yoghurt was less in appearance and colour compared to control sample at all treatments. On the other hand, the sample with high concentration of Dibis (4%) had lower values than that in the other samples. The higher level of Dibis concentration reduced the score for appearance and colour. This may be due to reduction in water holding capacity of the curd mass as it affects the protein interaction during coagulation process, resulting into more yield of syneresis.

Overall acceptability:

As shown in Table 6, the Date syrup-yoghurt with 3% Dibis stored at 7 days had superior scores, followed by 4% Dibis without storage. While the control sample stored at 7 days had the lowest value of overall scores.

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دراسات على استخدام الدبس في صناعة الزيادي

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تم استخلاص الدبس من البلح السيوي لإستخدامه في صناعة زيادي الدبس ، وذلك بإضافة الدبس الذي تم تركيزه إلى ٧٢% بنسب إضافة ١ ، ٣ ، ٥ ، ٧% دبس إلى اللبن المعامل حراريا ، ثم إجراء عملية التخمير بإضافة البادئ بنسبة ٢% مع وجود عينة مقارنة بدون إضافة دبس ، وتم تخزين العينات على درجة حرارة الثلاجة لمدة ٣ ، ٦ ، ٩ أيام ، وقد أوضحت النتائج المتحصل عليها ما يلي :-

- ١- الدبس المتحصل عليه يحتوي على نسبة عالية من الجوامد الكلية والحموضة ، كما يعتبر غني في بعض الأملاح المعدنية مثل الكالسيوم والبوتاسيوم والفوسفور والماغنسيوم والحديد .
- ٢- زيادة كلا من الجوامد الكلية والحموضة والكثافة في الزيادي العادي وزيادي الدبس تدريجيا بزيادة تركيز الدبس وكذلك بزيادة فترة التخزين .
- ٣- تناقص كمية الدهن في الزيادي العادي وزيادي الدبس بزيادة تركيز الدبس تدريجيا وكذلك بزيادة فترة التخزين .
- ٤- زيادة النيتروجين الذائب وتناقص نسبة النيتروجين الكلي بينما تزيد النسبة بين النيتروجين الذائب والكلي تدريجيا بزيادة فترة التخزين في كلا من الزيادي العادي وكذلك في زيادي الدبس .
- ٥- زيادة كلا من البوتاسيوم والفوسفور والماغنسيوم والحديد في الزيادي العادي وزيادي الدبس بزيادة تركيز الدبس وكذلك بالتخزين على ٩ أيام من التخزين ، بينما تزيد كمية الكالسيوم بعد ٩ أيام من التخزين وتتناقص بزيادة تركيز نسبة الدبس .

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- ٦- زيادة حجم الشرش المنفصل (التشريح) وكذلك قوة صلابة الخثرة في كلا من الزبادي العادي وزبادي الدبس تدريجيا بزيادة تركيز الدبس وكذلك بزيادة فترة التخزين .
- ٧- حصل زبادي الدبس على أعلى درجات في النكهة عن الزبادي العادي حتى ستة أيام من التخزين .
- ٨- زبادي الدبس المحتوي على ٧% دبس حصل على أقل الدرجات في النكهة ، التركيب والقوام ، اللون والمظهر وكذلك في درجات التحكيم الكلية ، بينما العينات المحتوية على ٣% دبس والمخزنة لمدة ثلاثة أيام حصلت على أعلى درجات تحكيم يليها المحتوية على ٥% دبس وبدون تخزين .
- ٩- زبادي الدبس المحتوي على ٣% دبس والمخزن لمدة ثلاثة أيام حصل على أعلى درجات تحكيم ، يليه الطازج والمحتوي على ٥% دبس ، بينما عينات الزبادي العادي حصلت العينات المخزنة لمدة ستة أيام على أقل درجات التحكيم .